Keiichi Imato

List of Publications by Year
in descending order

41 papers	1,939 citations	448610 19 h-index	312153 41 g-index
44 all docs	44 docs citations	44 times ranked	2035 citing authors

#	Article	IF	Citations
1	Tetraphenyletheneâ€“anthracene-based fluorescence emission sensor for the detection of water with photo-induced electron transfer and aggregation-induced emission characteristics. New Journal of Chemistry, 2022, 46, 12474-12481.	1.4	7
2	Mechanofluorochromism of (Dâ€“Ïâ€“)‹sub›2‹/sub›A-type azine-based fluorescent dyes. RSC Advances, 2022, 12, 13797-13809.	1.7	5
3	Self-healing polyurethane elastomers based on charge-transfer interactions for biomedical applications. Polymer Journal, 2021, 53, 355-362.	1.3	17
4	Synthesis, photophysical and electrochemical properties of 1,1â€²,3,3â€²-tetrasubstituted-4,4â€²-bibenzo[‹i›c‹/i›]thiophene derivatives with different substituents on the thiophene rings. New Journal of Chemistry, 2021, 45, 13258-13261.	1.4	2
5	Polymer films doped with fluorescent sensor for moisture and water droplet based on photo-induced electron transfer. RSC Advances, 2021, 11, 17046-17050.	1.7	12
6	Development of phenazine-2,3-diol-based photosensitizers: effect of formyl groups on singlet oxygen generation. Materials Chemistry Frontiers, 2021, 5, 5298-5304.	3.2	8
7	Diversification of Conjugated Polymers via Postpolymerization Nucleophilic Aromatic Substitution Reactions with Sulfur-, Oxygen-, and Nitrogen-Based Nucleophiles. Macromolecules, 2021, 54, 725-735.	2.2	6
8	Synthesis, optical and electrochemical properties of 4,4â€²-bibenzo[‹i›c‹/i›]thiophene derivatives. RSC Advances, 2021, 11, 18870-18880.	1.7	6
9	Development of 4,4â€²-bibenzo[‹i›c‹/i›]thiophene fluorophores with substituents on the thiophene rings. New Journal of Chemistry, 2021, 45, 17085-17094.	1.4	2
10	Fluorescence sensors for detection of water based on tetraphenyletheneâ€“anthracene possessing both solvatofluorochromic properties and aggregation-induced emission (AIE) characteristics. New Journal of Chemistry, 2021, 45, 4164-4173.	1.4	21
11	Synthesis, Optical and Electrochemical Properties of Benzofuro[2,3-<i>c</i>]carbazoloquinol Fluorescent Dyes. Electrochemistry, 2021, 89, 562-566.	0.6	0
12	Development of highly sensitive fluorescent sensor and fluorescent sensor-doped polymer films for trace amounts of water based on photo-induced electron transfer. Materials Advances, 2021, 2, 7662-7670.	2.6	8
13	Phenazine-based photosensitizers for singlet oxygen generation. Materials Chemistry Frontiers, 2020, 4, 589-596.	3.2	27
14	Synthesis, optical and electrochemical properties of propeller-type 3,5,8-trithienyl-BODIPY dyes. Materials Chemistry Frontiers, 2020, 4, 2762-2771.	3.2	16
15	Development of optical sensor for water in acetonitrile based on propeller-structured BODIPY-type pyridineâ€“boron trifluoride complex. RSC Advances, 2020, 10, 33836-33843.	1.7	12
16	Development of fluorescent sensors based on a combination of PET (photo-induced electron transfer) and FRET (FÃ¶rster resonance energy transfer) for detection of water. Materials Advances, 2020, 1, 354-362.	2.6	22
17	Fluorescent supramolecular mechanophores based on charge-transfer interactions. Chemical Communications, 2020, 56, 7937-7940.	2.2	32
18	Cell adhesion control by photoinduced LCST shift of PNIPAAm-based brush scaffolds. Journal of Materials Chemistry B, 2020, 8, 2393-2399.	2.9	16

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19	Synthesis, photophysical and electrochemical properties of pyridine, pyrazine and triazine-based (Dâ€“Ï€â€“)₂A fluorescent dyes. Beilstein Journal of Organic Chemistry, 2019, 15, 1712-1721.	1.3	10
20	Fluorescent sensor for water based on photo-induced electron transfer and FÃ¶rster resonance energy transfer: anthracene-(aminomethyl)phenylboronic acid ester-BODIPY structure. RSC Advances, 2019, 9, 15335-15340.	1.7	15
21	Development of an intramolecular charge transfer-type colorimetric and fluorescence sensor for water by fusion with a juloidine structure and complexation with boron trifluoride. RSC Advances, 2019, 9, 31466-31473.	1.7	24
22	Reorganizable and stimuli-responsive polymers based on dynamic carbonâ€“carbon linkages in diarylbibenzofuranones. Polymer, 2018, 137, 395-413.	1.8	43
23	Photoresponsive fiber scaffolds with a coreâ€“sheath nanostructure for regulating cell behaviors. Journal of Materials Chemistry B, 2018, 6, 2052-2056.	2.9	9
24	The photoregulation of a mechanochemical polymer scission. Nature Communications, 2018, 9, 3504.	5.8	59
25	Photoregulation of Retro-Dielsâ€“Alder Reaction at the Center of Polymer Chains. Chemistry Letters, 2017, 46, 992-994.	0.7	9
26	Dynamic covalent diarylbibenzofuranone-modified nanocellulose: mechanochromic behaviour and application in self-healing polymer composites. Polymer Chemistry, 2017, 8, 2115-2122.	1.9	75
27	Enhancing Mechanochemical Activation in the Bulk State by Designing Polymer Architectures. ACS Macro Letters, 2016, 5, 1124-1127.	2.3	92
28	Polymerâ€“Inorganic Composites with Dynamic Covalent Mechanochromophore. Macromolecules, 2016, 49, 5903-5911.	2.2	86
29	Autonomously Substitutable Organosilane Thin Films Based on Dynamic Covalent Diarylbibenzofuranone Units. Chemistry Letters, 2016, 45, 36-38.	0.7	8
30	Repeatable mechanochemical activation of dynamic covalent bonds in thermoplastic elastomers. Chemical Communications, 2016, 52, 10482-10485.	2.2	76
31	Diarylbibenzofuranone-Based Dynamic Covalent Polymer Gels Prepared via Radical Polymerization and Subsequent Polymer Reaction. Gels, 2015, 1, 58-68.	2.1	9
32	Mechanophores with a Reversible Radical System and Freezingâ€Induced Mechanochemistry in Polymer Solutions and Gels. Angewandte Chemie - International Edition, 2015, 54, 6168-6172.	7.2	202
33	Self-Healing of a Cross-Linked Polymer with Dynamic Covalent Linkages at Mild Temperature and Evaluation at Macroscopic and Molecular Levels. Macromolecules, 2015, 48, 5632-5639.	2.2	125
34	Mechanochromic Dynamic Covalent Elastomers: Quantitative Stress Evaluation and Autonomous Recovery. ACS Macro Letters, 2015, 4, 1307-1311.	2.3	142
35	Metathesis-driven scrambling reactions between polybutadiene or naturally occurring polyisoprene and olefin-containing polyurethane. Polymer, 2015, 78, 145-153.	1.8	34
36	Network Reorganization of Dynamic Covalent Polymer Gels with Exchangeable Diarylbibenzofuranone at Ambient Temperature. Journal of the American Chemical Society, 2014, 136, 11839-11845.	6.6	90

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37	Plasticizer-Promoted Thermal Crosslinking of a Dynamic Covalent Polymer with Complementarily Reactive Alkoxyamine Units in the Side Chain under Bulk Conditions. Bulletin of the Chemical Society of Japan, 2014, 87, 1023-1025.	2.0	6
38	Insertion Metathesis Depolymerization of Aromatic Disulfide-containing Dynamic Covalent Polymers under Weak Intensity Photoirradiation. Chemistry Letters, 2013, 42, 1346-1348.	0.7	34
39	Reversibly Crosslinked Polymeric Micelles Formed by Autonomously Exchangeable Dynamic Covalent Bonds. Chemistry Letters, 2013, 42, 377-379.	0.7	18
40	SynthesisandSelf-healingPropertyofCrosslinkedPolymers withAutonomouslyExchangeableDynamicCovalentBonds. Journal of the Adhesion Society of Japan, 2012, 48, 156-162.	0.0	0
41	Selfâ€Healing of Chemical Gels Crossâ€Linked by Diarylbibenzofuranoneâ€Based Triggerâ€Free Dynamic Covalent Bonds at Room Temperature. Angewandte Chemie - International Edition, 2012, 51, 1138-1142.	7.2	431