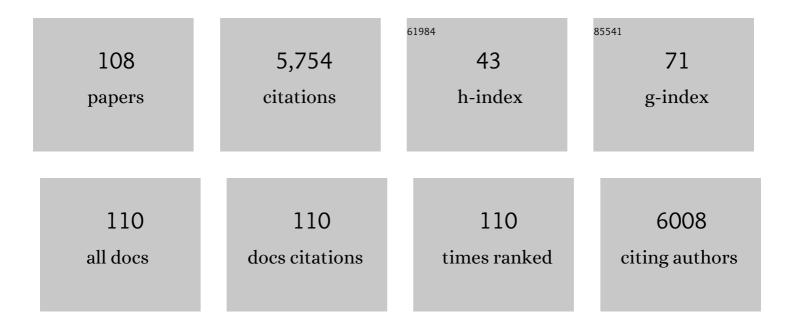
## Atula S D Sandanayaka

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Stable room-temperature continuous-wave lasing in quasi-2D perovskite films. Nature, 2020, 585, 53-57.	27.8	384
2	Fabrication of ZnPc/protein nanohorns for double photodynamic and hyperthermic cancer phototherapy. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 14773-14778.	7.1	254
3	Solutionâ€Processed Organic–Inorganic Perovskite Fieldâ€Effect Transistors with High Hole Mobilities. Advanced Materials, 2016, 28, 10275-10281.	21.0	237
4	Graphene oxide with covalently linked porphyrin antennae: Synthesis, characterization and photophysical properties. Journal of Materials Chemistry, 2011, 21, 109-117.	6.7	232
5	Indication of current-injection lasing from an organic semiconductor. Applied Physics Express, 2019, 12, 061010.	2.4	198
6	Triplet management for efficient perovskite light-emitting diodes. Nature Photonics, 2020, 14, 70-75.	31.4	190
7	Donorâ <sup>~</sup> 'Acceptor Nanohybrids of Zinc Naphthalocyanine or Zinc Porphyrin Noncovalently Linked to Single-Wall Carbon Nanotubes for Photoinduced Electron Transfer. Journal of Physical Chemistry C, 2007, 111, 6947-6955.	3.1	168
8	Supramolecular Carbon Nanotube-Fullerene Donorâ`'Acceptor Hybrids for Photoinduced Electron Transfer. Journal of the American Chemical Society, 2007, 129, 15865-15871.	13.7	144
9	SWNT-Based Supramolecular Nanoarchitectures with Photosensitizing Donor and Acceptor Molecules. Journal of Physical Chemistry Letters, 2010, 1, 2586-2593.	4.6	141
10	High performance from extraordinarily thick organic light-emitting diodes. Nature, 2019, 572, 502-506.	27.8	136
11	Toward continuous-wave operation of organic semiconductor lasers. Science Advances, 2017, 3, e1602570.	10.3	132
12	Near-Infrared Electroluminescence and Low Threshold Amplified Spontaneous Emission above 800 nm from a Thermally Activated Delayed Fluorescent Emitter. Chemistry of Materials, 2018, 30, 6702-6710.	6.7	119
13	Degradation Mechanisms of Organic Light-Emitting Diodes Based on Thermally Activated Delayed Fluorescence Molecules. Journal of Physical Chemistry C, 2015, 119, 23845-23851.	3.1	110
14	Sensitive Efficiency of Photoinduced Electron Transfer to Band Gaps of Semiconductive Single-Walled Carbon Nanotubes with Supramolecularly Attached Zinc Porphyrin Bearing Pyrene Glues. Journal of the American Chemical Society, 2010, 132, 8158-8164.	13.7	109
15	Intramolecular‣ocked High Efficiency Ultrapure Violetâ€Blue (CIEâ€y <0.046) Thermally Activated Delayed Fluorescence Emitters Exhibiting Amplified Spontaneous Emission. Advanced Functional Materials, 2021, 31, 2009488.	14.9	88
16	Effect of Axial Ligation or π-π-Type Interactions on Photochemical Charge Stabilization in "Two-Point― Bound Supramolecular Porphyrin-Fullerene Conjugates. Chemistry - A European Journal, 2005, 11, 4416-4428.	3.3	84
17	Electronic Interplay on Illuminated Aqueous Carbon Nanohornâ^'Porphyrin Ensembles. Journal of Physical Chemistry B, 2006, 110, 20729-20732.	2.6	79
18	Energy Transfer Followed by Electron Transfer in a Porphyrin Macrocycle and Central Acceptor Ligand: A Model for a Photosynthetic Composite of the Lightâ€Harvesting Complex and Reaction Center. Chemistry - A European Journal, 2009, 15, 2317-2327.	3.3	78

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#	Article	IF	CITATIONS
19	Selfâ€Assembled Singleâ€Walled Carbon Nanotube:Zinc–Porphyrin Hybrids through Ammonium Ion–Crown Ether Interaction: Construction and Electron Transfer. Chemistry - A European Journal, 2007, 13, 8277-8284.	3.3	77
20	Photosynthetic Reaction Center Mimicry of a "Special Pair―Dimer Linked to Electron Acceptors by a Supramolecular Approach: Self-Assembled Cofacial Zinc Porphyrin Dimer Complexed with Fullerene(s). Chemistry - A European Journal, 2007, 13, 916-922.	3.3	75
21	Photoinduced Electron-Transfer Processes between [C60]Fullerene and Triphenylamine Moieties Tethered by Rotaxane Structures. Through-Space Electron Transfer via Excited Triplet States of [60]Fullerene. Journal of Physical Chemistry A, 2004, 108, 5145-5155.	2.5	73
22	Centrifugal-Coated Quasi-Two-Dimensional Perovskite CsPb <sub>2</sub> Br <sub>5</sub> Films for Efficient and Stable Light-Emitting Diodes. Journal of Physical Chemistry Letters, 2017, 8, 5415-5421.	4.6	71
23	<i>N</i> -channel field-effect transistors with an organic-inorganic layered perovskite semiconductor. Applied Physics Letters, 2016, 109, .	3.3	68
24	Photoinduced Charge Separation in a Ferroceneâ^'Aluminum(III) Porphyrinâ^'Fullerene Supramolecular Triad. Journal of Physical Chemistry B, 2010, 114, 14348-14357.	2.6	64
25	Synthesis and Photoinduced Electron Transfer Processes of Rotaxanes Bearing [60]Fullerene and Zinc Porphyrin:Â Effects of Interlocked Structure and Length of Axle with Porphyrins. Journal of Physical Chemistry B, 2005, 109, 2516-2525.	2.6	61
26	Distributed Feedback Lasers and Light-Emitting Diodes Using 1-Naphthylmethylamnonium Low-Dimensional Perovskite. ACS Photonics, 2019, 6, 460-466.	6.6	55
27	(Terpyridine)copper(II)â^Carbon Nanohorns:  Metallo-nanocomplexes for Photoinduced Charge Separation. Journal of the American Chemical Society, 2008, 130, 4725-4731.	13.7	53
28	Characterization and Photoelectrochemical Properties of Nanostructured Thin Film Composed of Carbon Nanohorns Covalently Functionalized with Porphyrins. Journal of Physical Chemistry C, 2008, 112, 15735-15741.	3.1	52
29	Carbon Nanohorn–Porphyrin Dimer Hybrid Material for Enhancing Light-Energy Conversion. Journal of Physical Chemistry C, 2012, 116, 9439-9449.	3.1	52
30	Photoinduced Electron Transfer on Aqueous Carbon Nanohorn–Pyrene–Tetrathiafulvalene Architectures. Chemistry - A European Journal, 2007, 13, 7600-7607.	3.3	51
31	Photoinduced Charge Separation and Charge Recombination in [60]Fullereneâ^Ethylcarbazole and [60]Fullereneâ^Triphenylamines in Polar Solvents. Journal of Physical Chemistry A, 2005, 109, 4713-4720.	2.5	50
32	Quasiâ€Continuousâ€Wave Organic Thinâ€Film Distributed Feedback Laser. Advanced Optical Materials, 2016, 4, 834-839.	7.3	50
33	Diameterâ€6orted SWCNT–Porphyrin and SWCNT–Phthalocyanine Conjugates for Lightâ€Energy Harvesting. ChemPhysChem, 2011, 12, 2266-2273.	2.1	48
34	Low Amplified Spontaneous Emission Threshold from Organic Dyes Based on Bisâ€stilbene. Advanced Functional Materials, 2018, 28, 1802130.	14.9	48
35	The Leap from Organic Light-Emitting Diodes to Organic Semiconductor Laser Diodes. CCS Chemistry, 2020, 2, 1203-1216.	7.8	48
36	Preparation and Photophysical and Photoelectrochemical Properties of Supramolecular Porphyrin Nanorods Structurally Controlled by Encapsulated Fullerene Derivatives. Journal of Physical Chemistry C, 2009, 113, 18369-18378.	3.1	47

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37	Sequential Charge Separation in Two Axially Linked Phenothiazineâ^'Aluminum(III) Porphyrinâ^'Fullerene Triads. Journal of Physical Chemistry A, 2011, 115, 709-717.	2.5	47
38	Bionano Donor–Acceptor Hybrids of Porphyrin, ssDNA, and Semiconductive Single-Wall Carbon Nanotubes for Electron Transfer via Porphyrin Excitation. Journal of the American Chemical Society, 2011, 133, 19922-19930.	13.7	47
39	Axially assembled photosynthetic reaction center mimics composed of tetrathiafulvalene, aluminum( <scp>iii</scp> ) porphyrin and fullerene entities. Nanoscale, 2015, 7, 12151-12165.	5.6	47
40	Design, Syntheses, and Studies of Supramolecular Porphyrinâ^'Fullerene Conjugates, Using Bis-18-crown-6 Appended Porphyrins and Pyridine or Alkyl Ammonium Functionalized Fullerenes. Journal of Physical Chemistry B, 2006, 110, 5905-5913.	2.6	46
41	Structural and Photophysical Properties of Self-Assembled Porphyrin Nanoassemblies Organized by Ethylene Glycol Derivatives. Journal of Physical Chemistry C, 2008, 112, 19209-19216.	3.1	46
42	Photochemical Charge Separation in Supramolecular Phthalocyanineâ^'Multifullerene Conjugates Assembled by Crown Ether-Alkyl Ammonium Cation Interactions. Journal of Physical Chemistry A, 2010, 114, 10951-10959.	2.5	46
43	Suppression of external quantum efficiency rolloff in organic light emitting diodes by scavenging triplet excitons. Nature Communications, 2020, 11, 4926.	12.8	46
44	A Carbon NanohornPorphyrin Supramolecular Assembly for Photoinduced Electronâ€Transfer Processes. Chemistry - A European Journal, 2010, 16, 10752-10763.	3.3	45
45	Potassium Ion Controlled Switching of Intra- to Intermolecular Electron Transfer in Crown Ether Appended Free-Base Porphyrinâ^'Fullerene Donorâ^'Acceptor Systems. Journal of Physical Chemistry A, 2006, 110, 4338-4347.	2.5	44
46	Photoinduced Electron Transfer in Zinc Phthalocyanine Loaded on Singleâ€Walled Carbon Nanohorns in Aqueous Solution. Advanced Materials, 2009, 21, 4366-4371.	21.0	44
47	Prolongation of the Lifetime of the Charge-Separated State at Low Temperatures in a Photoinduced Electron-Transfer System of [60]Fullerene and Ferrocene Moieties Tethered by Rotaxane Structures. Journal of Physical Chemistry B, 2006, 110, 6516-6525.	2.6	43
48	Photoinduced processes of the supramolecularly functionalized semi-conductive SWCNTs with porphyrinsvia ion-pairing interactions. Energy and Environmental Science, 2011, 4, 707-716.	30.8	43
49	Photoinduced Charge Separation and Charge Recombination in [60]Fullerene-(Benzothiadiazole-Triphenylamine) Based Dyad in Polar Solvents. Journal of Physical Chemistry B, 2004, 108, 19995-20004.	2.6	42
50	Supramolecular Triad and Pentad Composed of Zinc–Porphyrin(s), Oxoporphyrinogen, and Fullerene(s): Design and Electron-Transfer Studies. Chemistry - A European Journal, 2007, 13, 4628-4635.	3.3	40
51	Extremely low amplified spontaneous emission threshold and blue electroluminescence from a spin-coated octafluorene neat film. Applied Physics Letters, 2017, 110, 023303.	3.3	40
52	Zinc Porphyrins Covalently Bound to the Side Walls of Single-Walled Carbon Nanotubes via Flexible Bonds: Photoinduced Electron Transfer in Polar Solvent. Journal of Physical Chemistry C, 2009, 113, 14493-14499.	3.1	39
53	Low threshold amplified spontaneous emission and ambipolar charge transport in non-volatile liquid fluorene derivatives. Chemical Communications, 2016, 52, 3103-3106.	4.1	39
54	Photoinduced electron transfer in aqueous carbon nanotube/block copolymer/CdS hybrids: application in the construction of photoelectrochemical cells. Journal of Materials Chemistry, 2009, 19, 8990.	6.7	38

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55	Improvement of the quasi-continuous-wave lasing properties in organic semiconductor lasers using oxygen as triplet quencher. Applied Physics Letters, 2016, 108, .	3.3	37
56	Light-induced Electron Transfer on the Single Wall Carbon Nanotube Surrounded in Anthracene Dendron in Aqueous Solution. Chemistry Letters, 2006, 35, 1188-1189.	1.3	36
57	Photoinduced electron-transfer processes of carbon nanohorns with covalently linked pyrene chromophores: charge-separation and electron-migration systems. Journal of Materials Chemistry, 2007, 17, 2540.	6.7	35
58	Photoinduced electron- and energy-transfer processes of [60]fullerene covalently bonded with one and two zinc porphyrin(s): effects of coordination of pyridine and diazabicyclooctane to Zn atom. Journal of Materials Chemistry, 2005, 15, 2276.	6.7	34
59	Twisted, Two-Faced Porphyrins as Hosts for Bispyridyl Fullerenes: Construction and Photophysical Properties. Journal of Physical Chemistry C, 2008, 112, 10559-10572.	3.1	34
60	Intrinsic carrier transport properties of solution-processed organic–inorganic perovskite films. Applied Physics Express, 2017, 10, 024103.	2.4	34
61	Large metal halide perovskite crystals for field-effect transistor applications. Applied Physics Letters, 2019, 115, .	3.3	34
62	Photoinduced Charge Separation and Charge Recombination in the [60]Fullereneâ^'Diphenylbenzothiadiazoleâ~'Triphenylamine Triad:Â Role of Diphenylbenzothiadiazole as Bridge. Journal of Physical Chemistry B, 2005, 109, 22502-22512.	2.6	29
63	Morphological control of organic–inorganic perovskite layers by hot isostatic pressing for efficient planar solar cells. Journal of Materials Chemistry A, 2015, 3, 17780-17787.	10.3	29
64	Photoinduced electron transfer in supramolecules composed of porphyrin/phthalocyanine and nanocarbon materials. Journal of Porphyrins and Phthalocyanines, 2009, 13, 1017-1033.	0.8	26
65	Exciton Quenching Behavior of Thermally Activated Delayed Fluorescence Molecules by Charge Carriers. Journal of Physical Chemistry C, 2015, 119, 7631-7636.	3.1	26
66	An Organic Laser Dye having a Small Singletâ€īriplet Energy Gap Makes the Selection of a Host Material Easier. Advanced Functional Materials, 2020, 30, 2001078.	14.9	26
67	A Novel Bis(zinc–porphyrin)–Oxoporphyrinogen Donor–Acceptor Triad: Synthesis, Electrochemical, Computational and Photochemical Studies. European Journal of Organic Chemistry, 2006, 2006, 595-603.	2.4	25
68	Self-Assembled Supramolecular Ferroceneâ^'Fullerene Dyads and Triad:  Formation and Photoinduced Electron Transfer. Journal of Physical Chemistry C, 2008, 112, 2222-2229.	3.1	25
69	Degradation Mechanism and Stability Improvement Strategy for an Organic Laser Gain Material 4,4′â€Bis[( <i>N</i> arbazole)styryl]biphenyl (BSBCz). Advanced Functional Materials, 2019, 29, 1807148.	14.9	25
70	Functionalization of Diameterâ€Sorted Semiconductive SWCNTs with Photosensitizing Porphyrins: Syntheses and Photoinduced Electron Transfer. Chemistry - A European Journal, 2012, 18, 11388-11398.	3.3	24
71	Photoinduced Electron Transfer of Single Walled Carbon Nanotubes Surrounded by Fullerodendrimers in Aqueous Media. Advanced Science Letters, 2010, 3, 353-357.	0.2	24
72	Photoinduced electron transfer in fullerene triads bearing pyrene and fluorene. Chemical Physics, 2006, 325, 452-460.	1.9	23

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73	Axle charge effects on photoinduced electron transfer processes in rotaxanes containing porphyrin and [60]fullerene. Physical Chemistry Chemical Physics, 2009, 11, 10908.	2.8	23
74	Lasing Operation under Longâ€Pulse Excitation in Solutionâ€Processed Organic Gain Medium: Toward CW Lasing in Organic Semiconductors. Advanced Optical Materials, 2020, 8, 2001234.	7.3	23
75	Photoinduced Electron-Transfer Processes of Fullerene (C60) with Amine Donors: Excited Triplet Route vs Excited Singlet Route. Bulletin of the Chemical Society of Japan, 2004, 77, 1313-1322.	3.2	22
76	Photoinduced Electron Transfer Processes in Rotaxanes Containing [60]Fullerene and Ferrocene: Effect of Axle Charge on Light-Induced Molecular Motion. Australian Journal of Chemistry, 2006, 59, 186.	0.9	22
77	Enhanced Electroluminescence from Organic Lightâ€Emitting Diodes with an Organic–Inorganic Perovskite Host Layer. Advanced Materials, 2018, 30, e1802662.	21.0	22
78	Axle Length Effect on Photoinduced Electron Transfer in Triad Rotaxane with Porphyrin, [60]Fullerene, and Triphenylamine. Journal of Physical Chemistry A, 2010, 114, 5242-5250.	2.5	21
79	Singlet-Triplet Exciton Annihilation Nearly Suppressed in Organic Semiconductor Laser Materials Using Oxygen as a Triplet Quencher. IEEE Journal of Selected Topics in Quantum Electronics, 2016, 22, 26-34.	2.9	21
80	Photoinduced Intramolecular Electron-Transfer Processes in [60]Fullerene-(Spacer)-N,N-Bis(biphenylyl)aniline Dyad in Solutions. Journal of Physical Chemistry A, 2005, 109, 2428-2435.	2.5	20
81	Photoinduced electron transfer processes in three component rotaxanes with porphyrins, [60]fullerene and triphenylamine. Journal of Porphyrins and Phthalocyanines, 2006, 10, 1346-1359.	0.8	20
82	Supramolecular Triads of Free-Base Porphyrin, Fullerene, and Ferric Porphyrins via the "Covalent-Coordinate―Binding Approach:  Formation, Sequential Electron Transfer, and Charge Stabilization. Journal of Physical Chemistry C, 2007, 111, 11123-11130.	3.1	20
83	Photoinduced electron transfer of nanohybrids of carbon nanohorns with amino groups and tetrabenzoic acid porphyrin in aqueous media. New Journal of Chemistry, 2009, 33, 2261.	2.8	20
84	Synthesis, Crystal Structure, and Photodynamics of Ï€-Expanded Porphyrinâ^'Fullerene Dyads Synthesized by Dielsâ^'Alder Reaction. Journal of Physical Chemistry B, 2010, 114, 14717-14728.	2.6	20
85	Fullerene- and Pyromellitdiimide-Appended Tripodal Ligands Embedded in Light-Harvesting Porphyrin Macrorings. Inorganic Chemistry, 2011, 50, 10249-10258.	4.0	18
86	Formation and photoinduced properties of zinc porphyrin-SWCNT and zinc phthalocyanine-SWCNT nanohybrids using diameter sorted nanotubes assembled via metal-ligand coordination and π–π stacking. Journal of Porphyrins and Phthalocyanines, 2011, 15, 1033-1043.	0.8	18
87	Photoinduced charge separation in three-layer supramolecular nanohybrids: fullerene–porphyrin–SWCNT. Physical Chemistry Chemical Physics, 2012, 14, 2940.	2.8	18
88	Vacuum-and-solvent-free fabrication of organic semiconductor layers for field-effect transistors. Scientific Reports, 2015, 5, 14547.	3.3	18
89	Markedly Improved Performance of Optically Pumped Organic Lasers with Two-Dimensional Distributed-Feedback Gratings. ACS Photonics, 2021, 8, 1324-1334.	6.6	17
90	Syntheses of [60]Fullerene andN,N-Bis(4-biphenyl)aniline-Tethered Rotaxane: Photoinduced Electron-Transfer Processes via Singlet and Triplet States of [60]Fullerene. Bulletin of the Chemical Society of Japan, 2005, 78, 1008-1017.	3.2	16

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91	Origin of external quantum efficiency roll-off in 4,4′-bis[( <i>N</i> -carbazole)styryl]biphenyl (BSBCz)-based inverted organic light emitting diode under high pulsed electrical excitation. Journal of Applied Physics, 2019, 126, .	2.5	16
92	Recycling of Triplets into Singlets for Highâ€Performance Organic Lasers. Advanced Optical Materials, 2022, 10, 2101302.	7.3	16
93	Co-facial magnesium porphyrin dimer complexed with fullerene: photosynthetic reaction center model of 'special pair' self-assembled to electron acceptor. Journal of Porphyrins and Phthalocyanines, 2008, 12, 857-865.	0.8	14
94	Low Amplified Spontaneous Emission and Lasing Thresholds from Hybrids of Fluorenes and Vinylphenylcarbazole. Advanced Optical Materials, 2020, 8, 2000784.	7.3	14
95	Electronâ€Affinity Substituent in 2,6â€Dicarbonitrile Diphenylâ€1λ <sup>5</sup> â€Phosphinine Towards Highâ€Quality Organic Lasing and Electroluminescence under High Current Injection. Advanced Functional Materials, 2021, 31, 2104529.	14.9	14
96	Through-space communication in a TTF–C60–TTF triad. New Journal of Chemistry, 2007, 31, 230-236.	2.8	13
97	High-coverage organic-inorganic perovskite film fabricated by double spin coating for improved solar power conversion and amplified spontaneous emission. Chemical Physics Letters, 2016, 661, 131-135.	2.6	11
98	2,6â€Dicarbonitrile Diphenylâ€1λ <sup>5</sup> â€Phosphinine (DCNP)—A Robust Conjugated Building Block fo Multiâ€Functional Dyes Exhibiting Tunable Amplified Spontaneous Emission. Advanced Optical Materials, 2021, 9, 2101122.	or 7.3	11
99	Photoinduced Intramolecular Electron-Transfer Processes in [60]Fullerene andN,N-Bis(biphenyl)aniline Molecular Systems in Solutions. Journal of Physical Chemistry A, 2005, 109, 8088-8095.	2.5	10
100	[60]Fullerene–perchlorotriphenylmethide anion triads. Synthesis and study of photoinduced intramolecular electron-transfer processes. Journal of Materials Chemistry, 2006, 16, 112-121.	6.7	9
101	Enhanced Operational Durability of Thermally Activated Delayed Fluorescenceâ€Based Organic Lightâ€Emitting Diodes with a Triazine Electron Transporter. Chemistry - A European Journal, 2020, 26, 5598-5602.	3.3	9
102	A spirofluorene-end-capped bis-stilbene derivative with a low amplified spontaneous emission threshold and balanced hole and electron mobilities. Optical Materials, 2020, 100, 109636.	3.6	8
103	Influence of the organic film thickness on the second order distributed feedback resonator properties of an organic semiconductor laser. Journal of Applied Physics, 2017, 121, .	2.5	6
104	Numerical Study of Triplet Dynamics in Organic Semiconductors Aimed for the Active Utilization of Triplets by TADF under Continuous-Wave Lasing. Journal of Physical Chemistry Letters, 2022, 13, 1323-1329.	4.6	6
105	Oxoporphyrinogens: From Redox and Spectroscopic Probe for Anion Sensing to a Platform for Construction of Supramolecular Donor-Acceptor Conjugates. ECS Transactions, 2008, 13, 127-136.	0.5	1
106	Organic Laser Dyes: An Organic Laser Dye having a Small Singletâ€Triplet Energy Gap Makes the Selection of a Host Material Easier (Adv. Funct. Mater. 30/2020). Advanced Functional Materials, 2020, 30, 2070204.	14.9	0
107	Organic Semiconductor Lasers: Lasing Operation under Longâ€Pulse Excitation in Solutionâ€Processed Organic Gain Medium: Toward CW Lasing in Organic Semiconductors (Advanced Optical Materials) Tj ETQq1 1 0.	7 <b>8.</b> #314 rg	gBT /Overloc
108	Photoinduced Electron Transfer of SWCNT-Based Supramolecular Nanoarchitectures with Photosensitizing Molecules. Transactions of the Materials Research Society of Japan, 2011, 36, 341-344.	0.2	0