Jayaraman Sivaguru

List of Publications by Year in descending order

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126907 123424 4,126 118 33 61 citations g-index h-index papers 138 138 138 3471 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Nonbiaryl and Heterobiaryl Atropisomers: Molecular Templates with Promise for Atropselective Chemical Transformations. Chemical Reviews, 2015, 115, 11239-11300.	47.7	517
2	Supramolecular Photochemistry as a Potential Synthetic Tool: Photocycloaddition. Chemical Reviews, 2016, 116, 9914-9993.	47.7	350
3	Supramolecular photocatalysis: combining confinement and non-covalent interactions to control light initiated reactions. Chemical Society Reviews, 2014, 43, 4084.	38.1	180
4	Asymmetric Photoreactions within Zeolites:  Role of Confinement and Alkali Metal Ions. Accounts of Chemical Research, 2003, 36, 509-521.	15.6	168
5	From Containers to Catalysts: Supramolecular Catalysis within Cucurbiturils. Chemistry - A European Journal, 2012, 18, 12178-12190.	3.3	159
6	Enantioselective Organoâ€Photocatalysis Mediated by Atropisomeric Thiourea Derivatives. Angewandte Chemie - International Edition, 2014, 53, 5604-5608.	13.8	159
7	Programmed Photodegradation of Polymeric/Oligomeric Materials Derived from Renewable Bioresources. Angewandte Chemie - International Edition, 2015, 54, 1159-1163.	13.8	104
8	Cobaloxime Catalysis: Selective Synthesis of Alkenylphosphine Oxides under Visible Light. Journal of the American Chemical Society, 2019, 141, 13941-13947.	13.7	93
9	Supramolecular photocatalysis by confinementâ€"photodimerization of coumarins within cucurbit[8]urils. Chemical Communications, 2010, 46, 225-227.	4.1	92
10	Photochemical type II reaction of atropchiral benzoylformamides to point chiral oxazolidin-4-ones. Axial chiral memory leading to enantiomeric resolution of photoproducts. Chemical Communications, 2010, 46, 4791.	4.1	87
11	Tailoring Atropisomeric Maleimides for Stereospecific [2 + 2] Photocycloaddition—Photochemical and Photophysical Investigations Leading to Visible-Light Photocatalysis. Journal of the American Chemical Society, 2014, 136, 8729-8737.	13.7	80
12	Manipulating Photochemical Reactivity of Coumarins within Cucurbituril Nanocavities. Organic Letters, 2008, 10, 3339-3342.	4.6	76
13	Enantiospecific Photochemical Norrish/Yang Type II Reaction of Nonbiaryl Atropchiral α-Oxoamides in Solution—Axial to Point Chirality Transfer. Journal of the American Chemical Society, 2009, 131, 11314-11315.	13.7	75
14	Supramolecular photocatalysis: insights into cucurbit[8]uril catalyzed photodimerization of 6-methylcoumarin. Chemical Communications, 2011, 47, 6323.	4.1	75
15	Use of Chirally Modified Zeolites and Crystals in Photochemical Asymmetric Synthesis. Journal of the American Chemical Society, 2002, 124, 2858-2859.	13.7	72
16	Light-Induced Transfer of Molecular Chirality in Solution: Enantiospecific Photocyclization of Molecularly Chiral Acrylanilides. Journal of the American Chemical Society, 2009, 131, 5036-5037.	13.7	63
17	Realizing an Aza Paternò–Büchi Reaction. Angewandte Chemie - International Edition, 2017, 56, 7056-7061.	13.8	61
18	The Reaction of Singlet Oxygen with Enecarbamates: A Mechanistic Playground for Investigating Chemoselectivity, Stereoselectivity, and Vibratioselectivity of Photooxidations. Accounts of Chemical Research, 2008, 41, 387-400.	15.6	60

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19	Singlet Oxygen Mediated Oxidation of Olefins within Zeolites: Selectivity and Complexities. Tetrahedron, 2000, 56, 6927-6943.	1.9	58
20	Temperature and Solvent Control of the Stereoselectivity in the Reactions of Singlet Oxygen with Oxazolidinone-Substituted Enecarbamates. Journal of the American Chemical Society, 2004, 126, 10498-10499.	13.7	54
21	Enantioselective Organoâ€Photocatalysis Mediated by Atropisomeric Thiourea Derivatives. Angewandte Chemie, 2014, 126, 5710-5714.	2.0	54
22	Stereocontrol within Confined Spaces:Â Enantioselective Photooxidation of Enecarbamates Inside Zeolite Supercages. Journal of the American Chemical Society, 2004, 126, 10816-10817.	13.7	49
23	Taming the excited state reactivity of imines – from non-radiative decay to aza Paternò–Büchi reaction. Chemical Society Reviews, 2021, 50, 1617-1641.	38.1	49
24	Evaluating Thiourea Architecture for Intramolecular [2+2] Photocycloaddition of 4â€Alkenylcoumarins. Advanced Synthesis and Catalysis, 2014, 356, 2763-2768.	4.3	47
25	Transposed Paternò–Büchi Reaction. Journal of the American Chemical Society, 2017, 139, 655-662.	13.7	47
26	Tale of Twisted Molecules. Atropselective Photoreactions: Taming Light Induced Asymmetric Transformations through Non-biaryl Atropisomers. Accounts of Chemical Research, 2016, 49, 2713-2724.	15.6	45
27	Reactive spin state dependent enantiospecific photocyclization of axially chiral $\hat{l}\pm$ -substituted acrylanilides. Chemical Communications, 2011, 47, 2568-2570.	4.1	44
28	Regiodivergent Photocyclization of Dearomatized Acylphloroglucinols: Asymmetric Syntheses of (â^)-Nemorosone and (â^)-6- <i>epi</i> -Garcimultiflorone A. Journal of the American Chemical Society, 2019, 141, 11315-11321.	13.7	43
29	Direct measurement of the singlet oxygen lifetime in zeolites by near-IR phosphorescence. Photochemical and Photobiological Sciences, 2005, 4, 403.	2.9	37
30	Life cycle assessment of photodegradable polymeric material derived from renewable bioresources. Journal of Cleaner Production, 2017, 142, 2935-2944.	9.3	37
31	Photodimerization and complexation dynamics of coumarins in the presence of cucurbit[8]urils. Photochemical and Photobiological Sciences, 2008, 7, 1473-1479.	2.9	36
32	Enhanced Diastereoselectivity via Confinement:Â Photoisomerization of 2,3-Diphenylcyclopropane-1-carboxylic Acid Derivatives within Zeolites. Journal of Organic Chemistry, 2004, 69, 6533-6547.	3.2	34
33	Light-Induced Enantiospecific 4Ï€ Ring Closure of Axially Chiral 2-Pyridones: Enthalpic and Entropic Effects Promoted by H-Bonding. Journal of the American Chemical Society, 2011, 133, 17106-17109.	13.7	34
34	Evaluating brominated thioxanthones as organoâ€photocatalysts. Journal of Physical Organic Chemistry, 2017, 30, e3738.	1.9	33
35	Cation–π interactions as a tool to enhance the power of a chiral auxiliary during asymmetric photoreactions within zeolites. Chemical Communications, 2003, , 116-117.	4.1	31
36	Intramolecular Paternò–Bþchi reaction of atropisomeric α-oxoamides in solution and in the solid-state. Chemical Communications, 2013, 49, 8713.	4.1	30

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37	Light-induced stereospecific intramolecular [2+2]-cycloaddition of atropisomeric 3,4-dihydro-2-pyridones. Chemical Communications, 2013, 49, 4346-4348.	4.1	30
38	Photophysical aspects of 6-methylcoumarin–cucurbit[8]uril host–guest complexes. Canadian Journal of Chemistry, 2011, 89, 310-316.	1.1	29
39	The influence of chiral auxiliaries is enhanced within zeolites. Tetrahedron Letters, 2000, 41, 8231-8235.	1.4	28
40	Enhanced Diastereoselectivity via Confinement:Â Diastereoselective Photoisomerization of 2,3-Diphenyl-1-benzoylcyclopropane Derivatives within Zeolites. Journal of Organic Chemistry, 2004, 69, 5528-5536.	3.2	28
41	Stereoselective Photooxidation of Enecarbamates:  Reactivity of Ozone vs Singlet Oxygen. Organic Letters, 2005, 7, 2089-2092.	4.6	28
42	Enantio- and Diastereodifferentiatingcis,trans-Photoisomerization of 2β,3β-Diphenylcyclopropane-1α-carboxylic Acid Derivatives in Organized Media. Organic Letters, 2000, 2, 2801-2804.	4.6	26
43	Light-Induced Geometric Isomerization of 1,2-Diphenylcyclopropanes Included within Y Zeolites:  Role of Cationâ^'Guest Binding. Journal of Organic Chemistry, 2002, 67, 8711-8720.	3.2	26
44	Enantiospecific Photochemical Transformations under Elevated Pressure. Chemistry - A European Journal, 2013, 19, 4327-4334.	3.3	26
45	Organophotocatalysis: Insights into the Mechanistic Aspects of Thioureaâ€Mediated Intermolecular [2+2]â€Photocycloadditions. Angewandte Chemie - International Edition, 2016, 55, 5446-5451.	13.8	26
46	Synthesis of silicon quantum dots using cyclohexasilane (Si ₆ H ₁₂). Journal of Materials Chemistry C, 2016, 4, 8206-8213.	5.5	26
47	Total Syntheses of the Isomeric Aglain Natural Products Foveoglinâ€A and Perviridisinâ€B: Selective Excitedâ€State Intramolecular Protonâ€Transfer Photocycloaddition. Angewandte Chemie - International Edition, 2017, 56, 14479-14482.	13.8	26
48	Origin of stretched-exponential photoluminescence relaxation in size-separated silicon nanocrystals. AIP Advances, 2017, 7, 055314.	1.3	24
49	Realizing the Photoene Reaction with Alkenes under Visible Light Irradiation and Bypassing the Favored [2 + 2]-Photocycloaddition. Journal of the American Chemical Society, 2018, 140, 13185-13189.	13.7	22
50	6Ï€-Photocyclization of O-tert-butylacrylanilides. N-substitution dictates the regiochemistry of cyclization. Photochemical and Photobiological Sciences, 2009, 8, 751-754.	2.9	21
51	Cucurbiturils as Reaction Containers for Photocycloaddition of Olefins. Israel Journal of Chemistry, 2018, 58, 264-275.	2.3	21
52	Dictating Photoreactivity through Restricted Bond Rotations: Cross-Photoaddition of Atropisomeric Acrylimide Derivatives under UV/Visible-Light Irradiation. Journal of Physical Chemistry A, 2014, 118, 10596-10602.	2.5	20
53	Use of a confined space (zeolite) in enantio- and diastereo-selective photoreactions. Microporous and Mesoporous Materials, 2001, 48, 319-328.	4.4	19
54	Reactive-State Spin-Dependent Diastereoselective Photoisomerization oftrans,trans-2,3-Diphenylcyclopropane-1- carboxylic Acid Derivatives Included in Zeolites. Organic Letters, 2002, 4, 4221-4224.	4.6	19

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55	Enantiospecific photochemical 6π-ring closure of α-substituted atropisomeric acrylanilides–role of alkali metal ions. Photochemical and Photobiological Sciences, 2014, 13, 141-144.	2.9	19
56	Control of Chirality by Cations in Confined Spaces: Photooxidation of Enecarbamates Inside Zeolite Supercagesâ€. Photochemistry and Photobiology, 2006, 82, 123.	2.5	18
57	Fun with Photons: Selective Light Induced Reactions in Solution and in Water Soluble Nano-containers. Chimia, 2011, 65, 202.	0.6	18
58	Uncovering New Excited State Photochemical Reactivity by Altering the Course of the De Mayo Reaction. Journal of the American Chemical Society, 2021, 143, 3677-3681.	13.7	17
59	Photoreactions with a Twist: Atropisomerismâ€Driven Divergent Reactivity of Enones with UV and Visible Light. Chemistry - A European Journal, 2016, 22, 11339-11348.	3.3	16
60	Realizing an Aza Paternò–BÃ⅓chi Reaction. Angewandte Chemie, 2017, 129, 7162-7167.	2.0	16
61	Confined space and cations enhance the power of a chiral auxiliary: photochemistry of 1,2-diphenylcyclopropane derivatives Electronic supplementary information (ESI) available: experimental details of irradiation, extraction and analysis of products, and representative synthesis and spectral data of reactant cis and product trans isomers; total number of pages 21. See	4.1	15
62	Conformationally controlled (entropy effects), stereoselective vibrational quenching of singlet oxygen in the oxidative cleavage of oxazolidinone-functionalized enecarbamates through solvent and temperature variations. Tetrahedron, 2006, 62, 6707-6717.	1.9	15
63	Evaluating thiourea/urea catalyst for enantioselective 6Ï€-photocyclization of acrylanilides. Journal of Photochemistry and Photobiology A: Chemistry, 2016, 331, 84-88.	3.9	15
64	Mechanism of photoisomerization of optically pure trans-2,3-diphenylcyclopropane-1-carboxylic acid derivatives. Photochemical and Photobiological Sciences, 2005, 4, 119.	2.9	14
65	A comparative mechanistic analysis of the stereoselectivity trends observed in the oxidation of chiral oxazolidinone-functionalized enecarbamates by singlet oxygen, ozone, and triazolinedione. Tetrahedron, 2006, 62, 10647-10659.	1.9	14
66	Photochemistry of Atropisomers: Non-biaryl Atropisomers for Stereospecific Phototransformations. Chemistry Letters, 2014, 43, 1816-1825.	1.3	14
67	Photolysis of glutaraldehyde in brine: A showcase study for removal of a common biocide in oil and gas produced water. Journal of Hazardous Materials, 2018, 353, 254-260.	12.4	14
68	Energy Transfer Catalysis by Visible Light: Atrop―and Regioâ€5elective Intermolecular [2+2]â€Photocycloaddition of Maleimide with Alkenes. European Journal of Organic Chemistry, 2020, 2020, 1478-1481.	2.4	14
69	Photoisomerization of 2,3-diphenylcyclopropane-1-carboxylic acid derivativesThis paper is dedicated to Professor Fred Lewis on the event of his 60th birthday Photochemical and Photobiological Sciences, 2003, 2, 1101.	2.9	13
70	Zeolite-coated quartz fibers as media for photochemical and photophysical studies. Chemical Communications, 2002, , 596-597.	4.1	12
71	Enantiospecific 6π-photocyclization of atropisomeric α-substituted acrylanilides in the solid-state: role of crystalline confinement on enantiospecificity. Photochemical and Photobiological Sciences, 2011, 10, 1380-1383.	2.9	12
72	Metal-Free Visible Light-Mediated Photocatalysis: Controlling Intramolecular [2 + 2] Photocycloaddition of Enones through Axial Chirality. Journal of Organic Chemistry, 2016, 81, 7191-7200.	3.2	12

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73	Synthesis of Silica-Coated Magnetic Hydroxyapatite Composites for Drug Delivery Applications. Journal of Nanoscience and Nanotechnology, 2019, 19, 1951-1958.	0.9	12
74	Achieving Enantio and Diastereoselectivities in Photoreactions Through the Use of a Confined Space. , $2002, 159-188$.		12
75	A sustainable solution for removal of glutaraldehyde in saline water with visible light photocatalysis. Chemosphere, 2019, 220, 1083-1090.	8.2	10
76	Diamine Functionalized Cubic Mesoporous Silica for Ibuprofen Controlled Delivery. Journal of Nanoscience and Nanotechnology, 2015, 15, 4784-4791.	0.9	9
77	Towards Upcycling Biomassâ€Derived Crosslinked Polymers with Light. Angewandte Chemie - International Edition, 2022, 61, .	13.8	9
78	Engaging electronic effects for atropselective [5+2]-photocycloaddition of maleimides. Chemical Communications, 2016, 52, 8305-8308.	4.1	8
79	A photo-auxiliary approach – enabling excited state classical phototransformations with metal free visible light irradiation. Chemical Communications, 2017, 53, 1692-1695.	4.1	8
80	Organophotocatalysis: Insights into the Mechanistic Aspects of Thioureaâ€Mediated Intermolecular [2+2]â€Photocycloadditions. Angewandte Chemie, 2016, 128, 5536-5541.	2.0	7
81	Stereoselective E/Z photoisomerization of oxazolidinone functionalized enecarbamates: direct and triplet sensitized irradiation. Chemical Communications, 2005, , 3424.	4.1	6
82	Controlled diastereoselectivity at the alkene-geometry through selective encapsulation: E-Zphotoisomerization of oxazolidinone-functionalized enecarbamates within hydrophobic nano-cavities. Chemical Communications, 2007, , 819-821.	4.1	6
83	Photodegradation of (E)- and (Z)-Endoxifen in water by ultraviolet light: Efficiency, kinetics, by-products, and toxicity assessment. Water Research, 2020, 171, 115451.	11.3	6
84	Monocrotophos toxicity and bioenergetics of muscle weakness in the rat. Toxicology, 2010, 277, 6-10.	4.2	5
85	Decoding Stereocontrol During the Photooxygenation of Oxazolidinone-Functionalized Enecarbamates. Organic Letters, 2010, 12, 2142-2145.	4.6	5
86	Evaluating photodimerization of 6-methylcoumarin mediated by cucurbit[8]uril through mechanical grinding $\hat{a} \in ``Supramolecular effects of additives. Journal of Photochemistry and Photobiology A: Chemistry, 2013, 255, 10-15.$	3.9	5
87	Photoacidity of vanillin derivatives. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 355, 38-41.	3.9	5
88	Manipulating excited state reactivity and selectivity through hydrogen bonding – from solid state reactivity to Br¸nsted acid photocatalysis. Chemical Communications, 2022, 58, 1871-1880.	4.1	4
89	Using Restricted Bond Rotations to Enforce Excited-State Behavior of Organic Molecules. Synlett, 2022, 33, 1123-1134.	1.8	4
90	Vibrational deactivation of singlet oxygen: does it play a role in stereoselectivity during photooxygenation?. Photochemical and Photobiological Sciences, 2008, 7, 531.	2.9	3

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91	Physical and chemical quenching rates and their influence on stereoselective photooxygenation of oxazolidinone-functionalized enecarbamates. Photochemical and Photobiological Sciences, 2009, 8, 912-915.	2.9	3
92	Conjugate addition from the excited state. Chemical Communications, 2018, 54, 11021-11024.	4.1	3
93	Understanding Conformational Preferences of Atropisomeric Hydrazides and Its Influence on Excited State Transformations in Crystalline Media. Molecules, 2019, 24, 3001.	3.8	3
94	Photo-auxiliary approach to control excited state reactivity: Cross [2+2]-photocycloaddition of oxazolidinone based hydrazides. Journal of Photochemistry and Photobiology A: Chemistry, 2019, 382, 111883.	3.9	3
95	Chemoselective Photoreaction of Enamides: Divergent Reactivity towards [3+2]â€Photocycloaddition ⟨i>vs⟨ i> Paternò–Büchi Reaction⟨sup⟩â€⟨ sup⟩. Photochemistry and Photobiology, 2021, 97, 1391-1396.	2.5	3
96	A Sustainable Rural Food–Energy–Water Nexus Framework for the Northern Great Plains. Agricultural and Environmental Letters, 2016, 1, 160008.	1.2	2
97	Total Syntheses of the Isomeric Aglain Natural Products Foveoglinâ€A and Perviridisinâ€B: Selective Excitedâ€State Intramolecular Protonâ€Transfer Photocycloaddition. Angewandte Chemie, 2017, 129, 14671-14674.	2.0	2
98	Towards Upcycling Biomassâ€Derived Crosslinked Polymers with Light. Angewandte Chemie, 2022, 134, .	2.0	2
99	Isolation and syn Elimination of a Peterson Adduct to Obtain Optically Pure Product in the Diastereoselective Synthesis of Oxazolidinone- Functionalized Enecarbamates. Letters in Organic Chemistry, 2009, 6, 362-366.	0.5	1
100	Zeolite matrix assisted decomposition of singlet oxygen sensitizers during photooxidation. Journal of Photochemistry and Photobiology A: Chemistry, 2016, 331, 197-205.	3.9	1
101	Prof. R. Marshall Wilson (Oct 18, 1939 – Feb 20, 2020). Journal of Photochemistry and Photobiology A: Chemistry, 2020, 393, 112453.	3.9	1
102	Glutaraldehyde Removal from Flowback and Produced Waters using Photolysis. Proceedings of the Water Environment Federation, 2016, 2016, 2448-2457.	0.0	1
103	Confined space and cations enhance the power of a chiral auxiliary: photochemistry of 1,2-diphenylcyclopropane derivatives. Chemical Communications, 2002, , 830-1.	4.1	1
104	Keeping the name clean: $[2\hat{a} \in \% + \hat{a} \in \% 2]$ photocycloaddition. Photochemical and Photobiological Sciences, 2022, 21, 1333-1340.	2.9	1
105	Cation-Ï€ Interactions as a Tool to Enhance the Power of a Chiral Auxiliary During Asymmetric Photoreactions within Zeolites ChemInform, 2003, 34, no.	0.0	O
106	Achieving Enantio- and Diastereoselectivities in Photoreactions Through the Use of a Confined Space. ChemInform, 2003, 34, no.	0.0	0
107	Asymmetric Photoreactions within Zeolites: Role of Confinement and Alkali Metal Ions. ChemInform, 2003, 34, no.	0.0	O
108	Organic Photochemistry Within Zeolites. , 2003, , .		0

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109	Organic Photochemistry within Zeolites: Selectivity Through Confinement. ChemInform, 2004, 35, no.	0.0	0
110	Chiral Photochemistry Within Zeolites. ChemInform, 2005, 36, no.	0.0	0
111	A tribute to Nicholas J. Turroâ€"An icon of modern molecular photochemistry. Journal of Photochemistry and Photobiology A: Chemistry, 2013, 271, 130-131.	3.9	0
112	Frontispiece: Organophotocatalysis: Insights into the Mechanistic Aspects of Thioureaâ€Mediated Intermolecular [2+2]â€Photocycloadditions. Angewandte Chemie - International Edition, 2016, 55, .	13.8	0
113	Frontispiz: Organophotocatalysis: Insights into the Mechanistic Aspects of Thioureaâ€Mediated Intermolecular [2+2]â€Photocycloadditions. Angewandte Chemie, 2016, 128, .	2.0	0
114	Frontispiece: Realizing an Aza Paternò–Büchi Reaction. Angewandte Chemie - International Edition, 2017, 56, .	13.8	0
115	Frontispiz: Realizing an Aza Paternò–Büchi Reaction. Angewandte Chemie, 2017, 129, .	2.0	0
116	Photolytic fate of (E)- and (Z)-endoxifen in water and treated wastewater exposed to sunlight. Environmental Research, 2021, 197, 111121.	7.5	0
117	Glutaraldehyde Removal from Produced Waters Using Visible Light Driven Photocatalysis. Proceedings of the Water Environment Federation, 2017, 2017, 5312-5331.	0.0	0
118	Non-Biaryl Atropisomers: Anilides, Amides, Lactams, and Analogues with C–C and C–X Stereogenic Axes. , 2019, , 489-540.		0