Jayaraman Sivaguru

List of Publications by Year
in descending order

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

#	Article	IF	Citations
1	Manipulating excited state reactivity and selectivity through hydrogen bonding â€“ from solid state reactivity to BrÃ¸nsted acid photocatalysis. Chemical Communications, 2022, 58, 1871-1880.	4.1	4
2	Using Restricted Bond Rotations to Enforce Excited-State Behavior of Organic Molecules. Synlett, 2022, 33, 1123-1134.	1.8	4
3	Towards Upcycling Biomassâ€Derived Crosslinked Polymers with Light. Angewandte Chemie, 2022, 134, .	2.0	2
4	Towards Upcycling Biomassâ€Derived Crosslinked Polymers with Light. Angewandte Chemie - International Edition, 2022, 61, .	13.8	9
5	Keeping the name clean: [2â€‰+â€‰2] photocycloaddition. Photochemical and Photobiological Sciences, 2022, 21, 1333-1340.	2.9	1
6	Taming the excited state reactivity of imines â€“ from non-radiative decay to aza PaternÃ²â€“BÃ¼chi reaction. Chemical Society Reviews, 2021, 50, 1617-1641.	38.1	49
7	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
8	Photolytic fate of (E)- and (Z)-endoxifen in water and treated wastewater exposed to sunlight. Environmental Research, 2021, 197, 111121.	7.5	0
9	Chemoselective Photoreaction of Enamides: Divergent Reactivity towards [3+2]â€Photocycloaddition vs PaternÃ²â€“BÃ¼chi Reaction^{â€}. Photochemistry and Photobiology, 2021, 97, 1391-1396.	2.5	3
10	Energy Transfer Catalysis by Visible Light: Atropâ€•and Regioâ€Selective Intermolecular [2+2]â€Photocycloaddition of Maleimide with Alkenes. European Journal of Organic Chemistry, 2020, 2020, 1478-1481.	2.4	14
11	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
12	Prof. R. Marshall Wilson (Oct 18, 1939 â€“ Feb 20, 2020). Journal of Photochemistry and Photobiology A: Chemistry, 2020, 393, 112453.	3.9	1
13	Cobaloxime Catalysis: Selective Synthesis of Alkenylphosphine Oxides under Visible Light. Journal of the American Chemical Society, 2019, 141, 13941-13947.	13.7	93
14	Understanding Conformational Preferences of Atropisomeric Hydrazides and Its Influence on Excited State Transformations in Crystalline Media. Molecules, 2019, 24, 3001.	3.8	3
15	Regiodivergent Photocyclization of Dearomatized Acylphloroglucinols: Asymmetric Syntheses of (â^')-Nemorosone and (â^')-6-epi-Garcimultiflorone A. Journal of the American Chemical Society, 2019, 141, 11315-11321.	13.7	43
16	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
17	A sustainable solution for removal of glutaraldehyde in saline water with visible light photocatalysis. Chemosphere, 2019, 220, 1083-1090.	8.2	10
18	Synthesis of Silica-Coated Magnetic Hydroxyapatite Composites for Drug Delivery Applications. Journal of Nanoscience and Nanotechnology, 2019, 19, 1951-1958.	0.9	12

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19	Non-Biaryl Atropisomers: Anilides, Amides, Lactams, and Analogues with Câ€“C and Câ€“X Stereogenic Axes. , 2019, , 489-540.		0
20	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
21	Cucurbiturils as Reaction Containers for Photocycloaddition of Olefins. Israel Journal of Chemistry, 2018, 58, 264-275.	2.3	21
22	Photoacidity of vanillin derivatives. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 355, 38-41.	3.9	5
23	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
24	Conjugate addition from the excited state. Chemical Communications, 2018, 54, 11021-11024.	4.1	3
25	Realizing an Aza PaternÃ²â€“BÃ¼chi Reaction. Angewandte Chemie - International Edition, 2017, 56, 7056-7061.	13.8	61
26	Frontispiece: Realizing an Aza PaternÃ²â€“BÃ¼chi Reaction. Angewandte Chemie - International Edition, 2017, 56, .	13.8	0
27	A photo-auxiliary approach â€“ enabling excited state classical phototransformations with metal free visible light irradiation. Chemical Communications, 2017, 53, 1692-1695.	4.1	8
28	Transposed PaternÃ²â€“BÃ¼chi Reaction. Journal of the American Chemical Society, 2017, 139, 655-662.	13.7	47
29	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
30	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
31	Evaluating brominated thioxanthones as organoâ€photocatalysts. Journal of Physical Organic Chemistry, 2017, 30, e3738.	1.9	33
32	Realizing an Aza PaternÃ²â€“BÃ¼chi Reaction. Angewandte Chemie, 2017, 129, 7162-7167.	2.0	16
33	Frontispiz: Realizing an Aza PaternÃ²â€“BÃ¼chi Reaction. Angewandte Chemie, 2017, 129, .	2.0	0
34	Origin of stretched-exponential photoluminescence relaxation in size-separated silicon nanocrystals. AIP Advances, 2017, 7, 055314.	1.3	24
35	Life cycle assessment of photodegradable polymeric material derived from renewable bioresources. Journal of Cleaner Production, 2017, 142, 2935-2944.	9.3	37
36	Glutaraldehyde Removal from Produced Waters Using Visible Light Driven Photocatalysis. Proceedings of the Water Environment Federation, 2017, 2017, 5312-5331.	0.0	0

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37	A Sustainable Rural Foodâ€“Energyâ€“Water Nexus Framework for the Northern Great Plains. Agricultural and Environmental Letters, 2016, 1, 160008.	1.2	2
38	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
39	Frontispiece: Organophotocatalysis: Insights into the Mechanistic Aspects of Thioureaâ€Mediated Intermolecular [2+2]â€...Photocycloadditions. Angewandte Chemie - International Edition, 2016, 55, .	13.8	0
40	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
41	Organophotocatalysis: Insights into the Mechanistic Aspects of Thioureaâ€Mediated Intermolecular [2+2]â€...Photocycloadditions. Angewandte Chemie, 2016, 128, 5536-5541.	2.0	7
42	Zeolite matrix assisted decomposition of singlet oxygen sensitizers during photooxidation. Journal of Photochemistry and Photobiology A: Chemistry, 2016, 331, 197-205.	3.9	1
43	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
44	Synthesis of silicon quantum dots using cyclohexasilane (Si₆H₁₂). Journal of Materials Chemistry C, 2016, 4, 8206-8213.	5.5	26
45	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
46	Frontispiz: Organophotocatalysis: Insights into the Mechanistic Aspects of Thioureaâ€Mediated Intermolecular [2+2]â€...Photocycloadditions. Angewandte Chemie, 2016, 128, .	2.0	0
47	Supramolecular Photochemistry as a Potential Synthetic Tool: Photocycloaddition. Chemical Reviews, 2016, 116, 9914-9993.	47.7	350
48	Engaging electronic effects for atropselective [5+2]-photocycloaddition of maleimides. Chemical Communications, 2016, 52, 8305-8308.	4.1	8
49	Evaluating thiourea/urea catalyst for enantioselective 6Ï€-photocyclization of acrylanilides. Journal of Photochemistry and Photobiology A: Chemistry, 2016, 331, 84-88.	3.9	15
50	Glutaraldehyde Removal from Flowback and Produced Waters using Photolysis. Proceedings of the Water Environment Federation, 2016, 2016, 2448-2457.	0.0	1
51	Diamine Functionalized Cubic Mesoporous Silica for Ibuprofen Controlled Delivery. Journal of Nanoscience and Nanotechnology, 2015, 15, 4784-4791.	0.9	9
52	Nonbiaryl and Heterobiaryl Atropisomers: Molecular Templates with Promise for Atropselective Chemical Transformations. Chemical Reviews, 2015, 115, 11239-11300.	47.7	517
53	Programmed Photodegradation of Polymeric/Oligomeric Materials Derived from Renewable Bioresources. Angewandte Chemie - International Edition, 2015, 54, 1159-1163.	13.8	104
54	Enantiospecific photochemical 6Ï€-ring closure of Î±-substituted atropisomeric acrylanilidesâ€“role of alkali metal ions. Photochemical and Photobiological Sciences, 2014, 13, 141-144.	2.9	19

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55	Enantioselective Organoâ€Photocatalysis Mediated by Atropisomeric Thiourea Derivatives. Angewandte Chemie - International Edition, 2014, 53, 5604-5608.	13.8	159
56	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
57	Evaluating Thiourea Architecture for Intramolecular [2+2]â€‰Photocycloaddition of 4â€Alkenylcoumarins. Advanced Synthesis and Catalysis, 2014, 356, 2763-2768.	4.3	47
58	Supramolecular photocatalysis: combining confinement and non-covalent interactions to control light initiated reactions. Chemical Society Reviews, 2014, 43, 4084.	38.1	180
59	Tailoring Atropisomeric Maleimides for Stereospecific [2 + 2] Photocycloadditionâ€"Photochemical and Photophysical Investigations Leading to Visible-Light Photocatalysis. Journal of the American Chemical Society, 2014, 136, 8729-8737.	13.7	80
60	Photochemistry of Atropisomers: Non-biaryl Atropisomers for Stereospecific Phototransformations. Chemistry Letters, 2014, 43, 1816-1825.	1.3	14
61	Enantioselective Organoâ€Photocatalysis Mediated by Atropisomeric Thiourea Derivatives. Angewandte Chemie, 2014, 126, 5710-5714.	2.0	54
62	Intramolecular PaternÃ²â€“BÃ¼chi reaction of atropisomeric Î±-oxoamides in solution and in the solid-state. Chemical Communications, 2013, 49, 8713.	4.1	30
63	Light-induced stereospecific intramolecular [2+2]-cycloaddition of atropisomeric 3,4-dihydro-2-pyridones. Chemical Communications, 2013, 49, 4346-4348.	4.1	30
64	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
65	Evaluating photodimerization of 6-methylcoumarin mediated by cucurbit[8]uril through mechanical grinding â€“ Supramolecular effects of additives. Journal of Photochemistry and Photobiology A: Chemistry, 2013, 255, 10-15.	3.9	5
66	Enantiospecific Photochemical Transformations under Elevated Pressure. Chemistry - A European Journal, 2013, 19, 4327-4334.	3.3	26
67	From Containers to Catalysts: Supramolecular Catalysis within Cucurbiturils. Chemistry - A European Journal, 2012, 18, 12178-12190.	3.3	159
68	Reactive spin state dependent enantiospecific photocyclization of axially chiral Î±-substituted acrylanilides. Chemical Communications, 2011, 47, 2568-2570.	4.1	44
69	Enantiospecific 6Ï€-photocyclization of atropisomeric Î±-substituted acrylanilides in the solid-state: role of crystalline confinement on enantiospecificity. Photochemical and Photobiological Sciences, 2011, 10, 1380-1383.	2.9	12
70	Photophysical aspects of 6-methylcoumarinâ€“cucurbit[8]uril hostâ€“guest complexes. Canadian Journal of Chemistry, 2011, 89, 310-316.	1.1	29
71	Supramolecular photocatalysis: insights into cucurbit[8]uril catalyzed photodimerization of 6-methylcoumarin. Chemical Communications, 2011, 47, 6323.	4.1	75
72	Fun with Photons: Selective Light Induced Reactions in Solution and in Water Soluble Nano-containers. Chimia, 2011, 65, 202.	0.6	18

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73	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
74	Monocrotophos toxicity and bioenergetics of muscle weakness in the rat. Toxicology, 2010, 277, 6-10.	4.2	5
75	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
76	Decoding Stereocontrol During the Photooxygenation of Oxazolidinone-Functionalized Enecarbamates. Organic Letters, 2010, 12, 2142-2145.	4.6	5
77	Supramolecular photocatalysis by confinementâ€"photodimerization of coumarins within cucurbit[8]urils. Chemical Communications, 2010, 46, 225-227.	4.1	92
78	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
79	Enantiospecific Photochemical Norrish/Yang Type II Reaction of Nonbiaryl Atropchiral Î±-Oxoamides in Solutionâ€"Axial to Point Chirality Transfer. Journal of the American Chemical Society, 2009, 131, 11314-11315.	13.7	75
80	6Ï€-Photocyclization of O-tert-butylacrylanilides. N-substitution dictates the regiochemistry of cyclization. Photochemical and Photobiological Sciences, 2009, 8, 751-754.	2.9	21
81	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
82	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
83	Vibrational deactivation of singlet oxygen: does it play a role in stereoselectivity during photooxygenation?. Photochemical and Photobiological Sciences, 2008, 7, 531.	2.9	3
84	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
85	Photodimerization and complexation dynamics of coumarins in the presence of cucurbit[8]urils. Photochemical and Photobiological Sciences, 2008, 7, 1473-1479.	2.9	36
86	Manipulating Photochemical Reactivity of Coumarins within Cucurbituril Nanocavities. Organic Letters, 2008, 10, 3339-3342.	4.6	76
87	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
88	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
89	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
90	Control of Chirality by Cations in Confined Spaces: Photooxidation of Enecarbamates Inside Zeolite Supercagesâ€. Photochemistry and Photobiology, 2006, 82, 123.	2.5	18

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91	Chiral Photochemistry Within Zeolites. ChemInform, 2005, 36, no.	0.0	0
92	Direct measurement of the singlet oxygen lifetime in zeolites by near-IR phosphorescence. Photochemical and Photobiological Sciences, 2005, 4, 403.	2.9	37
93	Mechanism of photoisomerization of optically pure trans-2,3-diphenylcyclopropane-1-carboxylic acid derivatives. Photochemical and Photobiological Sciences, 2005, 4, 119.	2.9	14
94	Stereoselective Photooxidation of Enecarbamates:â€‰ Reactivity of Ozone vs Singlet Oxygen. Organic Letters, 2005, 7, 2089-2092.	4.6	28
95	Stereoselective E/Z photoisomerization of oxazolidinone functionalized enecarbamates: direct and triplet sensitized irradiation. Chemical Communications, 2005, , 3424.	4.1	6
96	Organic Photochemistry within Zeolites: Selectivity Through Confinement. ChemInform, 2004, 35, no.	0.0	0
97	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
98	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
99	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
100	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
101	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	0
102	Achieving Enantio- and Diastereoselectivities in Photoreactions Through the Use of a Confined Space. ChemInform, 2003, 34, no.	0.0	0
103	Asymmetric Photoreactions within Zeolites: Role of Confinement and Alkali Metal Ions. ChemInform, 2003, 34, no.	0.0	0
104	Cationâ€“Ï€ 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
105	Asymmetric Photoreactions within Zeolites:â€‰ Role of Confinement and Alkali Metal Ions. Accounts of Chemical Research, 2003, 36, 509-521.	15.6	168
106	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
107	Organic Photochemistry Within Zeolites. , 2003, , .		0
108	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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109	Light-Induced Geometric Isomerization of 1,2-Diphenylcyclopropanes Included within Y Zeolites:â€‰ Role of Cationâ'Guest Binding. Journal of Organic Chemistry, 2002, 67, 8711-8720.	3.2	26
110	Use of Chirally Modified Zeolites and Crystals in Photochemical Asymmetric Synthesis. Journal of the American Chemical Society, 2002, 124, 2858-2859.	13.7	72
111	Zeolite-coated quartz fibers as media for photochemical and photophysical studies. Chemical Communications, 2002, , 596-597.	4.1	12
112	Confined space and cations enhance the power of a chiral auxiliary: photochemistry of 1,2-diphenylcyclopropane derivativesElectronic 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 http://www.rsc.org/suppdata/cc/b2/b200640e/. Chemical Communications, 2002, , 830-831.	4.1	15
113	Achieving Enantio and Diastereoselectivities in Photoreactions Through the Use of a Confined Space. , 2002, , 159-188.		12
114	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
115	Use of a confined space (zeolite) in enantio- and diastereo-selective photoreactions. Microporous and Mesoporous Materials, 2001, 48, 319-328.	4.4	19
116	The influence of chiral auxiliaries is enhanced within zeolites. Tetrahedron Letters, 2000, 41, 8231-8235.	1.4	28
117	Singlet Oxygen Mediated Oxidation of Olefins within Zeolites: Selectivity and Complexities. Tetrahedron, 2000, 56, 6927-6943.	1.9	58
118	Enantio- and Diastereodifferentiatingcis,trans-Photoisomerization of 2Î²,3Î²-Diphenylcyclopropane-1Î±-carboxylic Acid Derivatives in Organized Media. Organic Letters, 2000, 2, 2801-2804.	4.6	26