Bernd Strehmel

List of Publications by Year
in descending order

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84 papers	2,588 citations	172457 29 h-index	223800 46 g-index
94 all docs	94 docs citations	94 times ranked	1738 citing authors

#	Article	IF	Citations
1	The Influence of Ïƒ and Ï€ Acceptors on Two-Photon Absorption and Solvatochromism of Dipolar and Quadrupolar Unsaturated Organic Compounds. ChemPhysChem, 2003, 4, 249-259.	2.1	198
2	Photophysical Properties of Fluorescence Probes. 2. A Model of Multiple Fluorescence for Stilbazolium Dyes Studied by Global Analysis and Quantum Chemical Calculations. Journal of Physical Chemistry B, 1997, 101, 2232-2243.	2.6	152
3	Nearâ€Infrared Sensitized Photoinduced Atomâ€Transfer Radical Polymerization (ATRP) with a Copper(II) Catalyst Concentration in the ppm Range. Angewandte Chemie - International Edition, 2018, 57, 7898-7902.	13.8	140
4	Effect of Aromatic Ring Substitution on the Optical Properties, Emission Dynamics, and Solid-State Behavior of Fluorinated Oligophenylenevinylenes. Journal of the American Chemical Society, 1999, 121, 1226-1236.	13.7	118
5	NIR-Sensitized Photoinitiated Radical Polymerization and Proton Generation with Cyanines and LED Arrays. Progress in Organic Coatings, 2016, 100, 32-46.	3.9	102
6	Carbon Dots as a Promising Green Photocatalyst for Free Radical and ATRPâ€Based Radical Photopolymerization with Blue LEDs. Angewandte Chemie - International Edition, 2020, 59, 3166-3171.	13.8	95
7	New iodonium salts in NIR sensitized radical photopolymerization of multifunctional monomers. RSC Advances, 2015, 5, 69915-69924.	3.6	76
8	New Highâ€Power LEDs Open Photochemistry for Nearâ€Infraredâ€Sensitized Radical and Cationic Photopolymerization. Angewandte Chemie - International Edition, 2019, 58, 4400-4404.	13.8	65
9	Fluorescence probes for investigation of epoxy systems and monitoring of crosslinking processes. Journal of Polymer Science, Part B: Polymer Physics, 1999, 37, 1367-1386.	2.1	55
10	Application of NIR-Photopolymers in the Graphic Industry: From Physical Chemistry to Lithographic Applications. Zeitschrift Fur Physikalische Chemie, 2014, 228, 129-153.	2.8	55
11	Photochemical Oxidation of NIR Photosensitizers in the Presence of Radical Initiators and Their Prospective Use in Dental Applications. ChemistrySelect, 2016, 1, 524-532.	1.5	55
12	Photophysical properties of fluorescence probes I: dialkylamino stilbazolium dyes. Journal of Biomedical Optics, 1996, 1, 98.	2.6	51
13	Synthesis, Characterization, and Optical Properties of Copolymers Containing Fluorine-Substituted Distyrylbenzene and Nonconjugated Spacers. Macromolecules, 1999, 32, 7409-7413.	4.8	50
14	NIRâ€Sensitized Activated Photoreaction between Cyanines and Oxime Esters: Freeâ€Radical Photopolymerization. Angewandte Chemie - International Edition, 2020, 59, 11440-11447.	13.8	47
15	Upconversionâ€Nanoparticleâ€Assisted Radical Polymerization at Î»=974â€...nm and the Generation of Acidic Cations. ChemPhotoChem, 2017, 1, 499-503.	3.0	45
16	Distinct Sustainable Carbon Nanodots Enable Free Radical Photopolymerization, Photoâ€ATRP and Photoâ€CuAAC Chemistry. Angewandte Chemie - International Edition, 2021, 60, 10983-10991.	13.8	44
17	Photophysics and photochemistry of NIR absorbers derived from cyanines: key to new technologies based on chemistry 4.0. Beilstein Journal of Organic Chemistry, 2020, 16, 415-444.	2.2	42
18	Synthesis of Polymeric Photoinitiators Containing Pendent Chromophoreâ^'Borate Ion Pairs:Â Photochemistry and Photopolymerization Activities1. Macromolecules, 1999, 32, 5203-5209.	4.8	40

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19	Digital Imaging of Lithographic Materials by Radical Photopolymerization and Photonic Baking with NIR Diode Lasers. Chemical Engineering and Technology, 2016, 39, 13-25.	1.5	39
20	Lichtinduzierte polymer- und polymerisationsreaktionen, 44. Zur kinetik der radikalischen photopolymerisation mehrfunktioneller acrylate in polymeren bindemitteln. Die Makromolekulare Chemie, 1991, 192, 779-791.	1.1	38
21	The excited states of stilbene and stilbenoid donor-acceptor dye systems. A theoretical study. Chemical Physics, 1993, 173, 525-537.	1.9	38
22	Nearâ€IR and UVâ€LED Sensitized Photopolymerization with Onium Salts Comprising Anions of Different Nucleophilicities. ChemPhotoChem, 2019, 3, 1127-1132.	3.0	37
23	Photochemistry with Cyanines in the Near Infrared: A Step to Chemistry 4.0 Technologies. Chemistry - A European Journal, 2019, 25, 12855-12864.	3.3	35
24	Nahinfrarotâ€sensibilisierte photoinduzierte ATRP mit einer Kupfer(II)â€Katalysatorkonzentration im ppmâ€Bereich. Angewandte Chemie, 2018, 130, 8025-8030.	2.0	34
25	Advances of Near Infrared Sensitized Radical and Cationic Photopolymerization: from Graphic Industry to Traditional Coatings. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2016, 29, 111-121.	0.3	33
26	NIRâ€Sensitized Cationic and Hybrid Radical/Cationic Polymerization and Crosslinking. Angewandte Chemie - International Edition, 2021, 60, 1465-1473.	13.8	32
27	Title is missing!. Die Makromolekulare Chemie, 1991, 192, 1981-1991.	1.1	31
28	New Intramolecular Fluorescence Probes That Monitor Photoinduced Radical and Cationic Cross-Linking. Macromolecules, 1999, 32, 7476-7482.	4.8	31
29	Two-Photon Absorption of Bis[4-(N,N-diphenylamino)phenylethynyl]arenes. ChemPhysChem, 2005, 6, 893-896.	2.1	30
30	Photochemical Treatment of Powder Coatings and VOCâ€Free Coatings with NIR Lasers Exhibiting Lineâ€Shaped Focus: Physical and Chemical Solidification. ChemPhotoChem, 2017, 1, 26-34.	3.0	30
31	Title is missing!. Angewandte Makromolekulare Chemie, 1990, 178, 131-142.	0.2	28
32	Sustainable Afterglow Roomâ€Temperature Phosphorescence Emission Materials Generated Using Natural Phenolics. Angewandte Chemie - International Edition, 2022, 61, .	13.8	28
33	Chapter 14. NIR Light for Initiation of Photopolymerization. RSC Polymer Chemistry Series, 2018, , 431-478.	0.2	26
34	NIR Lightâ€Induced ATRP for Synthesis of Block Copolymers Comprising UVâ€Absorbing Moieties. Chemistry - A European Journal, 2020, 26, 10444-10451.	3.3	25
35	Rational Selection of Cyanines to Generate Conjugate Acid and Free Radicals for Photopolymerization upon Exposure at 860â€‰nm. Angewandte Chemie - International Edition, 2021, 60, 26855-26865.	13.8	25
36	Recombination of Photogenerated Lophyl Radicals in Imidazoliumâ€Based Ionic Liquids. ChemPhysChem, 2009, 10, 3112-3118.	2.1	24

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37	Temperature Dependence of Interactions between Stable Piperidineâ€1â€yloxyl Derivatives and an Ionic Liquid. ChemPhysChem, 2008, 9, 1294-1302.	2.1	23
38	Nearâ€Infrared Photoinduced Copperâ€Catalyzed Azideâ€Alkyne Click Chemistry with a Cyanine Comprising a Barbiturate Group. ChemPhotoChem, 2019, 3, 1180-1186.	3.0	23
39	Photogenerated lophyl radicals in 1-alkyl-3-vinylimidazolium bis(trifluoromethylsulfonyl)imides. Photochemical and Photobiological Sciences, 2015, 14, 714-725.	2.9	22
40	NIR LEDs and NIR lasers as feasible alternatives to replace oven processes for treatment of thermal-responsive coatings. Journal of Coatings Technology Research, 2019, 16, 1527-1541.	2.5	22
41	NIR-Sensitized Photopolymerization with Iodonium Salts Bearing Weak Coordinating Anions. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2016, 29, 609-615.	0.3	20
42	Comparison between NIR and UV-Sensitized Radical and Cationic Reactivity of Iodonium Salts Comprising Anions with Different Coordination Behavior. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2017, 30, 633-638.	0.3	20
43	Photophysics of Upâ€Conversion Nanoparticles: Radical Photopolymerization of Multifunctional Methacrylates Comprising Blueâ€and UVâ€Sensitive Photoinitiators. ChemPhotoChem, 2019, 3, 1119-1126.	3.0	20
44	Neue Hochleistungsâ€LEDs ermÃ¶glichen Photochemie fÃ¼r die Nahinfrarotâ€sensibilisierte radikalische und kationische Photopolymerisation. Angewandte Chemie, 2019, 131, 4445-4450.	2.0	20
45	Temperature Dependence of Interactions Between Stable Piperidineâ€1â€yloxyl Derivatives and a Semicrystalline Ionic Liquid. ChemPhysChem, 2010, 11, 2182-2190.	2.1	18
46	Color intensity control in polymers using triarylmethane leuconitriles as color formers. Tetrahedron, 2001, 57, 967-974.	1.9	17
47	Extended mechanistic aspects on photoinitiated polymerization of 1,6-hexanediol diacrylate by hexaarylbisimidazoles and heterocyclic mercapto compounds. Photochemical and Photobiological Sciences, 2014, 13, 789-798.	2.9	16
48	Integration of Gold Nanoparticles into NIRâ€Radiation Curable Powder Resin. ChemistrySelect, 2016, 1, 5574-5578.	1.5	16
49	Kohlenstoffâ€Nanopunkte als Photokatalysatoren fÃ¼r die freie radikalische und ATRPâ€basierte radikalische Photopolymerisation mit blauen LEDs. Angewandte Chemie, 2020, 132, 3192-3197.	2.0	16
50	Photopolymerization of Functionalized Monomers Derived from Oleic Acid. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2016, 29, 123-132.	0.3	14
51	Functionalization of an alkyd resin with (meth)acrylate groups for photoinitiated polymerization. Progress in Organic Coatings, 2018, 125, 316-324.	3.9	14
52	NIRâ€Sensitized Activated Photoreaction between Cyanines and Oxime Esters: Freeâ€Radical Photopolymerization. Angewandte Chemie, 2020, 132, 11537-11544.	2.0	14
53	Command surfaces, 20. Fixation of surface-assisted homogeneous alignment of nematic liquid crystals by cationic photopolymerization. Macromolecular Rapid Communications, 1996, 17, 545-551.	3.9	12
54	Ion-Induced Manipulation of Photochemical Pathways in Crown Ether Compounds Based on Fluorinated Oligophenylenevinylenes: The Border between Ultrafast Photoswitches and Photoproduced Nanomaterials. Journal of Nanoscience and Nanotechnology, 2001, 1, 107-124.	0.9	11

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55	Structural concept for fluorinated Y-enynes with solvatochromic properties1This paper is dedicated to Professor Dr J. W. Neckers on the occasion of his 100th birthday.. Photochemical and Photobiological Sciences, 2002, 1, 942.	2.9	11
56	One- and Two-Photon Photochemistry and Photophysics of Poly(arylenevinylene)s Containing a Biphenyl Moiety. ChemPhysChem, 2005, 6, 267-276.	2.1	11
57	Green Approach of Photoinitiated Polymerization Using Monomers Derived from Oleic Acid and Ionic Liquid. ChemistrySelect, 2019, 4, 10214-10218.	1.5	11
58	Mediated Generation of Conjugate Acid by UV and Blue Sensitizers with Upconversion Nanoparticles at 980â€…nm. Chemistry - A European Journal, 2021, 27, 4297-4301.	3.3	11
59	Cyanines comprising barbiturate group facilitate <scp>NIRâ€light</scp> assisted <scp>ATRP</scp> under anaerobic and aerobic conditions at two wavelengths using Fe(<scp>III</scp>) catalyst. Journal of Polymer Science, 2021, 59, 2023-2035.	3.8	10
60	Photoinitiated polymerization of methacrylates comprising phenyl moieties. Journal of Polymer Science, 2020, 58, 3196-3208.	3.8	9
61	The NIR-sensitized cationic photopolymerization of oxetanes in combination with epoxide and acrylate monomers. Polymer Chemistry, 0, , .	3.9	9
62	Photochemistry and Photophysics of (1-Naphthoyl)diphenylphosphine Oxide. Journal of Physical Chemistry A, 1999, 103, 7757-7765.	2.5	8
63	NIRâ€sensibilisierte kationische und hybride radikalische/kationische Polymerisation und Vernetzung. Angewandte Chemie, 2021, 133, 1486-1495.	2.0	7
64	Formation of highly crosslinked polymer films in the presence of bio-based epoxy by photoinitiated cationic polymerization. Progress in Organic Coatings, 2021, 158, 106377.	3.9	7
65	Sustainable Afterglow Roomâ€Temperature Phosphorescence Emission Materials Generated Using Natural Phenolics. Angewandte Chemie, 2022, 134, .	2.0	7
66	Lichtinitiierte polymer- und polymerisationsreaktionen, 10. Photoinduzierte zersetzung von diareniodonium- und triarensulfoniumsalzen durch kaliumtrisoxalatoferrat. Die Makromolekulare Chemie, 1983, 184, 2409-2419.	1.1	6
67	Manufacturing and photocrosslinking of a new bioâ€based dimethacrylate resulting in hydrophobic crosslinked films. , 2022, 1, e202100003.		6
68	Synthesis of novolac on the basis of bisphenol A as curing agent for epoxy resins. Angewandte Makromolekulare Chemie, 1992, 200, 125-136.	0.2	5
69	Synthesis and photoinitiated cationic polymerization of epoxidized phenylpropanoid and Î±-pinene derivatives. Sustainable Chemistry and Pharmacy, 2022, 29, 100766.	3.3	5
70	Photophysical properties of stilbenes with imide groups. Journal of Photochemistry and Photobiology A: Chemistry, 1997, 105, 353-364.	3.9	4
71	Verschiedene nachhaltige Kohlenstoffnanopunkte fÃ¼r die freie radikalische Photopolymerisation, die Photoâ€ATRP und die Photoâ€CuACC Chemie. Angewandte Chemie, 2021, 133, 11078-11087.	2.0	4
72	Fluorescence probes for investigation of epoxy systems and monitoring of crosslinking processes. Journal of Polymer Science, Part B: Polymer Physics, 1999, 37, 1367-1386.	2.1	3

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73	Attaching of flexible chains to novolacs on the basis of bisphenol A. Journal of Applied Polymer Science, 1996, 60, 1221-1229.	2.6	2
74	Rational Selection of Cyanines to Generate Conjugate Acid and Free Radicals for Photopolymerization upon Exposure at 860nm. Angewandte Chemie, 0, , .	2.0	2
75	Title is missing!. Angewandte Makromolekulare Chemie, 1992, 201, 49-62.	0.2	1
76	Characterization of photochemical-cured acrylates with calorimetric methods. , 1994, 2195, 801.		1
77	Investigation of Molecular Solvents and Ionic Liquids with a Dual Probe. Zeitschrift Fur Physikalische Chemie, 2014, 228, .	2.8	1
78	Photochemical curing of epoxies in the liquid-crystalline state. , 1994, , .		0
79	Fluorinated Distyrylbenzene Containing Copolymers for Photoinduced Formation of Anisotropic Materials as Photoalignment Layers for Liquid Crystals. ACS Symposium Series, 2003, , 482-498.	0.5	0
80	Frontispiece: Photochemistry with Cyanines in the Near Infrared: A Step to Chemistry 4.0 Technologies. Chemistry - A European Journal, 2019, 25, .	3.3	0
81	Frontispiece: NIR Lightâ€Induced ATRP for Synthesis of Block Copolymers Comprising UVâ€Absorbing Moieties. Chemistry - A European Journal, 2020, 26, .	3.3	0
82	RÃ¼cktitelbild: Verschiedene nachhaltige Kohlenstoffnanopunkte fÃ¼r die freie radikalische Photopolymerisation, die Photoâ€ATRP und die Photoâ€CuACC Chemie (Angew. Chem. 19/2021). Angewandte Chemie, 2021, 133, 11096-11096.	2.0	0
83	Innentitelbild: Rationale Auswahl von Cyaninen zur Erzeugung von konjugierter SÃure und freien Radikalen fÃ¼r die Photopolymerisation durch Belichtung bei 860â€...nm (Angew. Chem. 51/2021). Angewandte Chemie, 2021, 133, 26618-26618.	2.0	0
84	Photochemistry in Germany. ChemPhotoChem, 0, , .	3.0	0