Arnulf Rosspeintner

List of Publications by Year
in descending order

72 papers	2,990 citations	159525 30 h-index	168321 53 g-index
74 all docs	74 docs citations	74 times ranked	3212 citing authors

#	Article	IF	Citations
1	Ultrafast Elementary Photochemical Processes of Organic Molecules in Liquid Solution. Chemical Reviews, 2017, 117, 10826-10939.	23.0	327
2	A Straightforward Synthesis and Structureâ€"Activity Relationship of Highly Efficient Initiators for Two-Photon Polymerization. Macromolecules, 2013, 46, 352-361.	2.2	158
3	Direct Visualization of Excited-State Symmetry Breaking Using Ultrafast Time-Resolved Infrared Spectroscopy. Journal of the American Chemical Society, 2016, 138, 4643-4649.	6.6	157
4	Ultrafast Photochemistry in Liquids. Annual Review of Physical Chemistry, 2013, 64, 247-271.	4.8	156
5	Recalling the appropriate representation of electronic spectra. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2006, 65, 727-731.	2.0	111
6	Symmetryâ€Breaking Charge Transfer and Hydrogen Bonding: Toward Asymmetrical Photochemistry. Angewandte Chemie - International Edition, 2016, 55, 15624-15628.	7.2	107
7	Acylgermanes: Photoinitiators and Sources for Ge-Centered Radicals. Insights into their Reactivity. Journal of the American Chemical Society, 2013, 135, 17314-17321.	6.6	95
8	Structureâˆ'Activity Relationship in D-Ï€-A-Ï€-D-Based Photoinitiators for the Two-Photon-Induced Photopolymerization Process. Macromolecules, 2009, 42, 6519-6528.	2.2	92
9	Bimolecular Photoinduced Electron Transfer Beyond the Diffusion Limit: The Rehmâ€"Weller Experiment Revisited with Femtosecond Time Resolution. Journal of the American Chemical Society, 2014, 136, 2026-2032.	6.6	88
10	Excited-State Symmetry Breaking in a Quadrupolar Molecule Visualized in Time and Space. Journal of Physical Chemistry Letters, 2017, 8, 6029-6034.	2.1	82
11	Synthesis and structureâ€activity relationship of several aromatic ketoneâ€based twoâ€photon initiators. Journal of Polymer Science Part A, 2011, 49, 3688-3699.	2.5	80
12	Bimolecular Photoinduced Electron Transfer in Imidazolium-Based Room-Temperature Ionic Liquids Is Not Faster than in Conventional Solvents. Journal of the American Chemical Society, 2012, 134, 3729-3736.	6.6	70
13	Whiteâ€Fluorescent Dualâ€Emission Mechanosensitive Membrane Probes that Function by Bending Rather than Twisting. Angewandte Chemie - International Edition, 2018, 57, 10559-10563.	7.2	67
14	Femtosecond broadband fluorescence upconversion spectroscopy: Spectral coverage versus efficiency. Review of Scientific Instruments, 2016, 87, 053115.	0.6	60
15	Specific Monitoring of Excited-State Symmetry Breaking by Femtosecond Broadband Fluorescence Upconversion Spectroscopy. Journal of Physical Chemistry Letters, 2017, 8, 5878-5883.	2.1	58
16	The Rehmâ€"Weller Experiment in View of Distant Electron Transfer. Chemistry - A European Journal, 2008, 14, 6213-6221.	1.7	57
17	Real-Time Observation of the Formation of Excited Radical Ions in Bimolecular Photoinduced Charge Separation: Absence of the Marcus Inverted Region Explained. Journal of the American Chemical Society, 2013, 135, 9843-9848.	6.6	56
18	Solvent tuning of photochemistry upon excited-state symmetry breaking. Nature Communications, 2020, 11, 1925.	5.8	54

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19	Spurious Observation of the Marcus Inverted Region in Bimolecular Photoinduced Electron Transfer. Journal of the American Chemical Society, 2012, 134, 11396-11399.	6.6	50
20	Time-Resolved Magnetic Field Effects Distinguish Loose Ion Pairs from Exciplexes. Journal of the American Chemical Society, 2013, 135, 15144-15152.	6.6	49
21	Cooperative enhancement versus additivity of two-photon-absorption cross sections in linear and branched squaraine superchromophores. Physical Chemistry Chemical Physics, 2016, 18, 16404-16413.	1.3	49
22	A biocompatible macromolecular two-photon initiator based on hyaluronan. Polymer Chemistry, 2017, 8, 451-460.	1.9	49
23	Turn-On Sulfide Ï€ Donors: An Ultrafast Push for Twisted Mechanophores. Journal of the American Chemical Society, 2015, 137, 15644-15647.	6.6	44
24	Excited State and Injection Dynamics of Triphenylamine Sensitizers Containing a Benzothiazole Electron-Accepting Group on TiO₂ and Al₂O₃ Thin Films. Journal of Physical Chemistry C, 2014, 118, 28509-28519.	1.5	41
25	Fully Reversible Interconversion between Locally Excited Fluorophore, Exciplex, and Radical Ion Pair Demonstrated by a New Magnetic Field Effect. Angewandte Chemie - International Edition, 2008, 47, 960-962.	7.2	38
26	Magnetic field effects on exciplex-forming systems: the effect on the locally excited fluorophore and its dependence on free energy. Physical Chemistry Chemical Physics, 2011, 13, 3446-3460.	1.3	37
27	Bimolecular photoinduced electron transfer reactions in liquids under the gaze of ultrafast spectroscopy. Physical Chemistry Chemical Physics, 2014, 16, 25741-25754.	1.3	36
28	Direct Observation of a Photochemical Alkyneâ€“Allene Reaction and of a Twisted and Rehybridized Intramolecular Charge-Transfer State in a Donorâ€“Acceptor Dyad. Journal of the American Chemical Society, 2017, 139, 16885-16893.	6.6	35
29	On the Coherent Description of Diffusion-Influenced Fluorescence Quenching Experiments. Chemistry - A European Journal, 2007, 13, 6474-6483.	1.7	34
30	Wavelength-optimized Two-Photon Polymerization Using Initiators Based on Multipolar Aminostyryl-1,3,5-triazines. Scientific Reports, 2018, 8, 17273.	1.6	32
31	Characterization of dimethylsulfoxide/glycerol mixtures: a binary solvent system for the study of â€œfriction-dependentâ€•chemical reactivity. Physical Chemistry Chemical Physics, 2016, 18, 18460-18469.	1.3	31
32	On the Coherent Description of Diffusionâ€Influenced Fluorescence Quenching Experimentsâ€…II: Early Events. Chemistry - A European Journal, 2010, 16, 2291-2299.	1.7	30
33	Machine Learning for Analysis of Time-Resolved Luminescence Data. ACS Photonics, 2018, 5, 4888-4895.	3.2	29
34	Influence of Solvent Relaxation on Ultrafast Excited-State Proton Transfer to Solvent. Journal of Physical Chemistry Letters, 2017, 8, 4516-4521.	2.1	28
35	Excited-State Dynamics of 3-Hydroxyflavone Anion in Alcohols. Journal of Physical Chemistry B, 2015, 119, 2434-2443.	1.2	27
36	Influence of the hydrogen-bond interactions on the excited-state dynamics of a pushâ€“pull azobenzene dye: the case of Methyl Orange. Physical Chemistry Chemical Physics, 2018, 20, 7254-7264.	1.3	27

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37	Optical transient absorption experiments reveal the failure of formal kinetics in diffusion assisted electron transfer reactions. Physical Chemistry Chemical Physics, 2018, 20, 25531-25546.	1.3	26
38	Probe dependence on polar solvation dynamics from fs broadband fluorescence. Physical Chemistry Chemical Physics, 2017, 19, 8815-8825.	1.3	25
39	Whiteâ€Fluorescent Dualâ€Emission Mechanosensitive Membrane Probes that Function by Bending Rather than Twisting. Angewandte Chemie, 2018, 130, 10719-10723.	1.6	22
40	Toward the Photoinduced Reactivity of 1,5-Diphenylpenta-1,4-diyn-3-one (DPD): Real-Time Investigations by Magnetic Resonance. Macromolecules, 2009, 42, 8034-8038.	2.2	21
41	Symmetryâ€Breaking Charge Transfer and Hydrogen Bonding: Toward Asymmetrical Photochemistry. Angewandte Chemie, 2016, 128, 15853-15857.	1.6	21
42	Highly Stable and Redâ€Emitting Nanovesicles Incorporating Lipophilic Diketopyrrolopyrroles for Cell Imaging. Chemistry - A European Journal, 2018, 24, 11386-11392.	1.7	20
43	Photophysical properties of 2,6-dicyano-N,N,N â€²,N â€²-tetramethyl-p-phenylenediamine. Journal of Photochemistry and Photobiology A: Chemistry, 2006, 183, 225-235.	2.0	19
44	Driving Force Dependence of Charge Recombination in Reactive and Nonreactive Solvents. Journal of Physical Chemistry A, 2012, 116, 9473-9483.	1.1	18
45	Photoinitiators with Î²-Phenylogous Cleavage: An Evaluation of Reaction Mechanisms and Performance. Macromolecules, 2012, 45, 1737-1745.	2.2	18
46	Initiators Based on Benzaldoximes: Bimolecular and Covalently Bound Systems. Macromolecules, 2012, 45, 8648-8657.	2.2	16
47	How good is the generalized Langevin equation to describe the dynamics of photo-induced electron transfer in fluid solution?. Journal of Chemical Physics, 2017, 146, 244505.	1.2	16
48	Towards efficient initiators for two-photon induced polymerization: fine tuning of the donor/acceptor properties. Molecular Systems Design and Engineering, 2019, 4, 437-448.	1.7	16
49	Synthesis and photophysical properties of 2,6-dicyano-p-phenylenediamine. Journal of Photochemistry and Photobiology A: Chemistry, 2011, 220, 54-63.	2.0	15
50	Silyl-based initiators for two-photon polymerization: from facile synthesis to quantitative structureâ€“activity relationship analysis. Polymer Chemistry, 2017, 8, 6644-6653.	1.9	15
51	Spectroscopic characteristics of a novel highly fluorescent p-phenylenediamine: Tetracyano-p-phenylenediamine. Journal of Photochemistry and Photobiology A: Chemistry, 2008, 199, 204-210.	2.0	14
52	EPR and ENDOR Studies of Dimeric Paracyclophane Radical Cations and Dications Containing Tri- and Pentamethylene-Bridged p-Phenylene Diamine Units. Journal of Physical Chemistry A, 2010, 114, 6487-6492.	1.1	14
53	Experimental Evidence of the Relevance of Orientational Correlations in Photoinduced Bimolecular Reactions in Solution. Journal of Physical Chemistry A, 2013, 117, 8814-8825.	1.1	14
54	Theory of fluorescence spectrum dynamics and its application to determining the relaxation characteristics of the solvent and intramolecular vibrations. Journal of Molecular Liquids, 2020, 298, 112016.	2.3	14

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55	Beyond the Threshold: A Study of Chalcogenophene-Based Two-Photon Initiators. Chemistry of Materials, 2022, 34, 3042-3052.	3.2	14
56	Effect of symmetric and asymmetric substitution on the optoelectronic properties of 9,10-dicyanoanthracene. Molecular Systems Design and Engineering, 2019, 4, 951-961.	1.7	13
57	Photophysics of two Prototypical Molecularâ€Wire Building Blocks: Solventâ€Induced Conformational Dynamics?. ChemPhysChem, 2010, 11, 1700-1710.	1.0	12
58	Broadband fluorescence reveals mechanistic differences in excited-state proton transfer to protic and aprotic solvents. Chemical Science, 2020, 11, 7963-7971.	3.7	12
59	Bimolecular photoinduced electron transfer in non-polar solvents beyond the diffusion limit. Journal of Chemical Physics, 2020, 152, 244501.	1.2	12
60	Donor-Substituted Diphenylacetylene Derivatives Act as Electron Donors and Acceptors. Journal of Organic Chemistry, 2011, 76, 5628-5635.	1.7	10
61	Bimolecular photo-induced electron transfer enlightened by diffusion. Journal of Chemical Physics, 2020, 153, 040902.	1.2	9
62	Fundamental Loadingâ€Curve Characteristics of the Persistent Phosphor SrAl₂O₄:Eu²⁺,Dy³⁺,B³⁺: The Effect of Temperature and Excitation Density. Advanced Photonics Research, 2022, 3, .	1.7	9
63	Salt Effect in Ion-Pair Dynamics after Bimolecular Photoinduced Electron Transfer in a Room-Temperature Ionic Liquid. Journal of Physical Chemistry Letters, 2018, 9, 7015-7020.	2.1	8
64	Propyl acetate/butyronitrile mixture is ideally suited for investigating the effect of dielectric stabilization on (photo)chemical reactions. RSC Advances, 2020, 10, 23682-23689.	1.7	6
65	Comment on â€œObservation of the Marcus Inverted Region for Bimolecular Photoinduced Electron-Transfer Reactions in Viscous Mediaâ€ Journal of Physical Chemistry B, 2016, 120, 9800-9803.	1.2	5
66	Halogen-Bond Assisted Photoinduced Electron Transfer. Molecules, 2019, 24, 4361.	1.7	4
67	Full relaxation dynamics recovery from ultrafast fluorescence experiments by means of the stochastic model: Does the solvent response dynamics depend on the fluorophore nature?. Journal of Molecular Liquids, 2022, 360, 119387.	2.3	4
68	Comment on â€œExothermic Rate Restrictions in Long-Range Photoinduced Charge Separationsâ€ Journal of Physical Chemistry A, 2011, 115, 7858-7860.	1.1	2
69	Photoinduced Electron Transfer Reactions: From the Elucidation of Old Problems in Bulk Solutions Towards the Exploration of Interfaces. Chimia, 2011, 65, 350-352.	0.3	2
70	Comment on â€œTheoretical Insights into the Excited State Decays of a Donorâ€“Acceptor Dyad: Is the Twisted and Rehybridized Intramolecular Charge-Transfer State Involved?â€ Journal of Physical Chemistry B, 2020, 124, 10578-10581.	1.2	2
71	Novel Highly Potential Initiators for the Two-Photon-Induced Photopolymerization Process. Materials Research Society Symposia Proceedings, 2009, 1179, 27.	0.1	0
72	Model-free Investigation of Ultrafast Bimolecular Chemical Reactions: Bimolecular Photo Induced Electron Transfer. EPJ Web of Conferences, 2013, 41, 05041.	0.1	0