Bern Kohler

List of Publications by Year
in descending order

105 papers	8,615 citations	61984 43 h-index	42399 92 g-index
106 all docs	106 docs citations	106 times ranked	4461 citing authors

#	Article	IF	Citations
1	Solventâ€Dependent Stabilization of a Charge Transfer State is the Key to Ultrafast Triplet State Formation in an Epigenetic DNA Nucleoside. Chemistry - A European Journal, 2021, 27, 10932-10940.	3.3	14
2	Ultrafast Electron Injection and Recombination Dynamics of Coumarin 343-Sensitized Cerium Oxide Nanoparticles. Journal of Physical Chemistry C, 2021, 125, 14827-14835.	3.1	5
3	A single nucleobase tunes nonradiative decay in a DNA-bound silver cluster. Journal of Chemical Physics, 2021, 155, 094305.	3.0	8
4	Ultrafast spectral hole burning reveals the distinct chromophores in eumelanin and their common photoresponse. Chemical Science, 2020, 11, 1248-1259.	7.4	34
5	Time-Resolved Vibrational Fingerprints for Two Silver Cluster-DNA Fluorophores. Journal of Physical Chemistry Letters, 2020, 11, 8958-8963.	4.6	14
6	Catecholâ€Based Molecular Memory Film for Redox Linked Bioelectronics. Advanced Electronic Materials, 2020, 6, 2000452.	5.1	14
7	Probing the heterogeneous structure of eumelanin using ultrafast vibrational fingerprinting. Nature Communications, 2020, 11, 4569.	12.8	35
8	Ultrafast excited state dynamics of silver ion-mediated cytosineâ€“cytosine base pairs in metallo-DNA. Journal of Chemical Physics, 2020, 153, 105104.	3.0	6
9	Photoreductive dissolution of cerium oxide nanoparticles and their size-dependent absorption properties. Physical Chemistry Chemical Physics, 2020, 22, 5756-5764.	2.8	11
10	Photo-protection/photo-damage in natural systems: general discussion. Faraday Discussions, 2019, 216, 538-563.	3.2	4
11	Photovoltaics and bio-inspired light harvesting: general discussion. Faraday Discussions, 2019, 216, 269-300.	3.2	0
12	DNA-like Photophysics in Self-Assembled Silver(I)â€“Nucleobase Nanofibers. Journal of Physical Chemistry B, 2019, 123, 5985-5994.	2.6	4
13	Ultrafast photoinduced energy and charge transfer: concluding remarks. Faraday Discussions, 2019, 216, 564-573.	3.2	1
14	Energy and charge-transfer in natural photosynthesis: general discussion. Faraday Discussions, 2019, 216, 133-161.	3.2	1
15	Probing eumelanin photoprotection using a catechol:quinone heterodimer model system. Faraday Discussions, 2019, 216, 520-537.	3.2	11
16	Effects of Intra- and Intermolecular Hydrogen Bonding on Oâ€“H Bond Photodissociation Pathways of a Catechol Derivative. Journal of Physical Chemistry A, 2019, 123, 5356-5366.	2.5	14
17	Isotopic substitution affects excited state branching in a DNA duplex in aqueous solution. Chemical Communications, 2019, 55, 4174-4177.	4.1	8
18	Molecular Dynamics Simulations of 2-Aminopurine-Labeled Dinucleoside Monophosphates Reveal Multiscale Stacking Kinetics. Journal of Physical Chemistry B, 2019, 123, 2291-2304.	2.6	4

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19	Intermolecular Hydrogen Bonding Modulates Oâ€H Photodissociation in Molecular Aggregates of a Catechol Derivative. Photochemistry and Photobiology, 2019, 95, 163-175.	2.5	19
20	Excited-State Dynamics of a DNA Duplex in a Deep Eutectic Solvent Probed by Femtosecond Time-Resolved IR Spectroscopy. Journal of Physical Chemistry A, 2018, 122, 2437-2444.	2.5	9
21	Light induced damage and repair in nucleic acids and proteins: general discussion. Faraday Discussions, 2018, 207, 389-408.	3.2	0
22	Photocrosslinking between nucleic acids and proteins: general discussion. Faraday Discussions, 2018, 207, 283-306.	3.2	5
23	Light induced charge and energy transport in nucleic acids and proteins: general discussion. Faraday Discussions, 2018, 207, 153-180.	3.2	1
24	Bionanophotonics: general discussion. Faraday Discussions, 2018, 207, 491-512.	3.2	0
25	Excited-state dynamics of mononucleotides and DNA strands in a deep eutectic solvent. Faraday Discussions, 2018, 207, 267-282.	3.2	7
26	Two-photon absorption spectra of fluorescent isomorphic DNA base analogs. Biomedical Optics Express, 2018, 9, 447.	2.9	19
27	Decay Pathways of Thymine Revisited. Journal of Physical Chemistry A, 2018, 122, 4819-4828.	2.5	23
28	Crystallization kinetics of cerium oxide nanoparticles formed by spontaneous, room-temperature hydrolysis of cerium(<scp>iv</scp>) ammonium nitrate in light and heavy water. Physical Chemistry Chemical Physics, 2017, 19, 3523-3531.	2.8	24
29	Ultrafast photochemical dynamics of the hexaaquairon(III) ion. Chemical Physics Letters, 2017, 683, 315-321.	2.6	9
30	Ultrafast Excited-State Deactivation of the Bacterial Pigment Violacein. Journal of Physical Chemistry B, 2017, 121, 7855-7861.	2.6	4
31	Excited-State Dynamics of Melamine and Its Lysine Derivative Investigated by Femtosecond Transient Absorption Spectroscopy. Molecules, 2016, 21, 1645.	3.8	15
32	Fast Spectroscopy of Biosystems. ChemPhysChem, 2016, 17, 1218-1219.	2.1	0
33	On the origin of multiexponential fluorescence decays from 2-aminopurine-labeled dinucleotides. Journal of Chemical Physics, 2016, 145, 155101.	3.0	14
34	Subnanosecond Emission Dynamics of AT DNA Oligonucleotides. ChemPhysChem, 2016, 17, 3558-3569.	2.1	7
35	Life in the light: nucleic acid photoproperties as a legacy of chemical evolution. Physical Chemistry Chemical Physics, 2016, 18, 24228-24238.	2.8	108
36	Photoinduced long-lived charge transfer excited states in AT-DNA strands. Physical Chemistry Chemical Physics, 2016, 18, 21241-21245.	2.8	27

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37	UV-Induced Proton-Coupled Electron Transfer in Cyclic DNA Miniduplexes. Journal of the American Chemical Society, 2016, 138, 7395-7401.	13.7	28
38	Excited-State Dynamics of DNA Duplexes with Different H-Bonding Motifs. Journal of Physical Chemistry Letters, 2016, 7, 950-954.	4.6	40
39	UV-Induced Proton Transfer between DNA Strands. Journal of the American Chemical Society, 2015, 137, 7059-7062.	13.7	125
40	Excited State Relaxation of Neutral and Basic 8-Oxoguanine. Journal of Physical Chemistry B, 2015, 119, 8293-8301.	2.6	12
41	Photoinduced Electron Transfer in DNA: Charge Shift Dynamics Between 8-Oxo-Guanine Anion and Adenine. Journal of Physical Chemistry B, 2015, 119, 7491-7502.	2.6	31
42	Ultrafast Hydrolysis of a Lewis Photoacid. Journal of Physical Chemistry B, 2015, 119, 2737-2748.	2.6	19
43	Interligand Electron Transfer in Heteroleptic Ruthenium(II) Complexes Occurs on Multiple Time Scales. Journal of Physical Chemistry A, 2015, 119, 4813-4824.	2.5	36
44	Excited States in DNA Strands Investigated by Ultrafast Laser Spectroscopy. Topics in Current Chemistry, 2014, 356, 39-87.	4.0	47
45	Efficient UV-induced charge separation and recombination in an 8-oxoguanine-containing dinucleotide. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 11612-11617.	7.1	64
46	Mode-specific vibrational relaxation of photoexcited guanosine 5â€²-monophosphate and its acid form: a femtosecond broadband mid-IR transient absorption and theoretical study. Physical Chemistry Chemical Physics, 2014, 16, 1487-1499.	2.8	26
47	Influence of Different Diimine (N^{â§}N) Ligands on the Photophysics and Reverse Saturable Absorption of Heteroleptic Cationic Iridium(III) Complexes Bearing Cyclometalating 2-{3-[7-(Benzothiazol-2-yl)fluoren-2-yl]phenyl}pyridine (C^{â§}N) Ligands. Journal of Physical Chemistry C, 2014, 118, 23233-23246.	3.1	40
48	Base Stacking in Adenosine Dimers Revealed by Femtosecond Transient Absorption Spectroscopy. Journal of the American Chemical Society, 2014, 136, 6362-6372.	13.7	54
49	Sequence-dependent thymine dimer formation and photoreversal rates in double-stranded DNA. Photochemical and Photobiological Sciences, 2013, 12, 1431-1439.	2.9	47
50	Ultrafast Excited-State Dynamics in Hexaethyleneglycol-Linked DNA Homoduplexes Made of AÂ·T Base Pairs. Journal of the American Chemical Society, 2013, 135, 10290-10293.	13.7	39
51	Hydrogen Bond Donors Accelerate Vibrational Cooling of Hot Purine Derivatives in Heavy Water. Journal of Physical Chemistry A, 2013, 117, 6771-6780.	2.5	43
52	Ultrafast Excited-State Dynamics and Vibrational Cooling of 8-Oxo-7,8-dihydro-2â€²-deoxyguanosine in D₂O. Journal of Physical Chemistry A, 2013, 117, 12851-12857.	2.5	18
53	Thymine Dimer Photoreversal in Purine-Containing Trinucleotides. Journal of Physical Chemistry B, 2012, 116, 698-704.	2.6	32
54	Ultrafast nonradiative decay by hypoxanthine and several methylxanthines in aqueous and acetonitrile solution. Physical Chemistry Chemical Physics, 2012, 14, 10677.	2.8	46

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55	Base-Stacking Disorder and Excited-State Dynamics in Single-Stranded Adenine Homo-oligonucleotides. Journal of Physical Chemistry B, 2012, 116, 10266-10274.	2.6	54
56	Observation of Long-Lived Excited States in DNA Oligonucleotides with Significant Base Sequence Disorder. Journal of Physical Chemistry Letters, 2011, 2, 133-138.	4.6	31
57	Ultrafast Electron Transfer Dynamics in Ruthenium Polypyridyl Complexes with a Ï€-Conjugated Ligand. Journal of Physical Chemistry B, 2010, 114, 14679-14688.	2.6	27
58	Nonradiative Decay Mechanisms in DNA Model Systems. Journal of Physical Chemistry Letters, 2010, 1, 2047-2053.	4.6	159
59	Synchrotron radiation circular dichroism of various Gâ€quadruplex structures. Biopolymers, 2010, 93, 429-433.	2.4	29
60	Electronic coupling between cytosine bases in DNA single strands and i-motifs revealed from synchrotron radiation circular dichroism experiments. Physical Chemistry Chemical Physics, 2010, 12, 3426.	2.8	25
61	The Excitedâ€State Lifetimes in a Gâ‹…C DNA Duplex are Nearly Independent of Helix Conformation and Baseâ€Pairing Motif. ChemPhysChem, 2009, 10, 1421-1425.	2.1	24
62	Deuterium Isotope Effect on Excited-State Dynamics in an Alternating GC Oligonucleotide. Journal of the American Chemical Society, 2009, 131, 17557-17559.	13.7	48
63	DNA Excited-State Dynamics: From Single Bases to the Double Helix. Annual Review of Physical Chemistry, 2009, 60, 217-239.	10.8	737
64	Time-resolved infrared spectroscopy of the lowest triplet state of thymine and thymidine. Chemical Physics, 2008, 347, 383-392.	1.9	64
65	Ultrafast excited-state dynamics of RNA and DNA C tracts. Chemical Physics, 2008, 350, 165-174.	1.9	30
66	Predicting Thymine Dimerization Yields from Molecular Dynamics Simulations. Biophysical Journal, 2008, 94, 3590-3600.	0.5	90
67	Ground-State Recovery Following UV Excitation is Much Slower in GÂ·Câ€™DNA Duplexes and Hairpins Than in Mononucleotides. Journal of the American Chemical Society, 2008, 130, 10844-10845.	13.7	53
68	UV excitation of single DNA and RNA strands produces high yields of exciplex states between two stacked bases. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 10285-10290.	7.1	172
69	Internal conversion to the electronic ground state occurs via two distinct pathways for pyrimidine bases in aqueous solution. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 435-440.	7.1	283
70	Thymine Dimerization in DNA Is an Ultrafast Photoreaction. Science, 2007, 315, 625-629.	12.6	496
71	Solvent and Solvent Isotope Effects on the Vibrational Cooling Dynamics of a DNA Base Derivative. Journal of Physical Chemistry A, 2007, 111, 10460-10467.	2.5	91
72	Symposium-in-Print: DNA Photodynamics Introduction. Photochemistry and Photobiology, 2007, 83, 592-594.	2.5	7

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73	Solvent-Dependent Photophysics of 1-Cyclohexyluracil:Â Ultrafast Branching in the Initial Bright State Leads Nonradiatively to the Electronic Ground State and a Long-Lived1nÏ€* State. Journal of Physical Chemistry B, 2006, 110, 18641-18650.	2.6	112
74	Complexity of excited-state dynamics in DNA (Reply). Nature, 2006, 441, E8-E8.	27.8	56
75	Base stacking controls excited-state dynamics in AÂ·T DNA. Nature, 2005, 436, 1141-1144.	27.8	424
76	Singlet Excited-State Dynamics of 5-Fluorocytosine and Cytosine:Â An Experimental and Computational Study. Journal of Physical Chemistry A, 2005, 109, 4431-4436.	2.5	104
77	Ultrafast Excited-State Dynamics in Nucleic Acids. Chemical Reviews, 2004, 104, 1977-2020.	47.7	1,157
78	Stricklerâ€“Berg analysis of excited singlet state dynamics in DNA and RNA nucleosides. Faraday Discussions, 2004, 127, 137-147.	3.2	87
79	Influence of Secondary Structure on Electronic Energy Relaxation in Adenine Homopolymers. Journal of Physical Chemistry B, 2004, 108, 11182-11188.	2.6	110
80	Ultrafast Excited-State Dynamics of Adenine and Monomethylated Adenines in Solution:Â Implications for the Nonradiative Decay Mechanism. Journal of the American Chemical Society, 2003, 125, 13594-13601.	13.7	173
81	Singlet Excited-state Lifetimes of Cytosine Derivatives Measured by Femtosecond Transient AbsorptionÂ¶. Photochemistry and Photobiology, 2003, 77, 158.	2.5	93
82	Femtosecond electron ejection in liquid acetonitrile: Evidence for cavity electrons and solvent anions. Journal of Chemical Physics, 2002, 117, 8855-8866.	3.0	55
83	Solvent Reorganization Controls the Rate of Proton Transfer from Neat Alcohol Solvents to Singlet Diphenylcarbene. Journal of the American Chemical Society, 2002, 124, 6428-6438.	13.7	71
84	Ultrafast Decay of Electronically Excited Singlet Cytosine via a Ï€,Ï€* to nO,Ï€* State Switch. Journal of the American Chemical Society, 2002, 124, 6818-6819.	13.7	302
85	DNA Excited-State Dynamics:Â Ultrafast Internal Conversion and Vibrational Cooling in a Series of Nucleosides. Journal of the American Chemical Society, 2001, 123, 10370-10378.	13.7	389
86	Excited State Dynamics of Methyl Viologen. Ultrafast Photoreduction in Methanol and Fluorescence in Acetonitrile. Journal of Physical Chemistry A, 2001, 105, 5768-5777.	2.5	119
87	Ultrafast Carbonylcarbene Formation and Spin-Equilibration. Journal of the American Chemical Society, 2000, 122, 8087-8088.	13.7	18
88	Ultrafast Internal Conversion of Electronically Excited RNA and DNA Nucleosides in Water. Journal of the American Chemical Society, 2000, 122, 9348-9349.	13.7	265
89	Ultrafast Photoionization Dynamics of Indole in Water. Journal of Physical Chemistry A, 1999, 103, 2460-2466.	2.5	106
90	Quantum control of I2 in the gas phase and in condensed phase solid Kr matrix. Journal of Chemical Physics, 1997, 106, 8486-8503.	3.0	111

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91	Quantum Control of NaI Photodissociation Reaction Product States by Ultrafast Tailored Light Pulses. Journal of Physical Chemistry A, 1997, 101, 3815-3822.	2.5	94
92	Quantum Control of Wave Packet Evolution with Tailored Femtosecond Pulses. Physical Review Letters, 1995, 74, 3360-3363.	7.8	300
93	Phase and intensity characterization of femtosecond pulses from a chirped-pulse amplifier by frequency-resolved optical gating. Optics Letters, 1995, 20, 483.	3.3	64
94	Ultrashort-pulse measurement using noninstantaneous nonlinearities: Raman effects in frequency-resolved optical gating. Optics Letters, 1995, 20, 486.	3.3	42
95	Controlling the Future of Matter. Accounts of Chemical Research, 1995, 28, 133-140.	15.6	159
96	Broadly tunable 30-fs pulses produced by optical parametric amplification. Optics Letters, 1994, 19, 2000.	3.3	107
97	Pulse retrieval in frequency-resolved optical gating based on the method of generalized projections. Optics Letters, 1994, 19, 2152.	3.3	150
98	From supramolecular photochemistry to the molecular computer. Pure and Applied Chemistry, 1992, 64, 1335-1342.	1.9	32
99	Holography in frequency selective media II: Controlling the diffraction efficiency. Journal of Luminescence, 1992, 53, 215-218.	3.1	9
100	Femtosecond molecular dynamics of liquid carbon disulphide at high pressure. Journal of Physics Condensed Matter, 1990, 2, SA109-SA113.	1.8	6
101	Molecular dynamics in liquids from femtosecond time-resolved impulsive stimulated scattering. IEEE Journal of Quantum Electronics, 1988, 24, 470-481.	1.9	82
102	Intramolecular and intermolecular dynamics in molecular liquids through femtosecond time-resolved impulsive stimulated scattering. Revue De Physique AppliquÃ©e, 1987, 22, 1717-1734.	0.4	71
103	Intermolecular vibrational motion in CS2 liquid at 165 â©½ Tâ©¾ 300 K observed by femtosecond time-resolved impulsive stimulated scattering. Chemical Physics Letters, 1987, 141, 16-24.	2.6	92
104	Holographic method for determining the spatial extent of photochemistry: Room-temperature photopolymerization of diacetylene TS6. Chemical Physics Letters, 1986, 125, 251-256.	2.6	6
105	Orthogonal Redox and Optical Stimuli Can Induce Independent Responses for Catechol-Chitosan Films. Materials Chemistry Frontiers, 0, , .	5.9	3