

Bern Kohler

List of Publications by Year in descending order

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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	Ultrafast Excited-State Dynamics in Nucleic Acids. <i>Chemical Reviews</i> , 2004, 104, 1977-2020.	47.7	1,157
2	DNA Excited-State Dynamics: From Single Bases to the Double Helix. <i>Annual Review of Physical Chemistry</i> , 2009, 60, 217-239.	10.8	737
3	Thymine Dimerization in DNA Is an Ultrafast Photoreaction. <i>Science</i> , 2007, 315, 625-629.	12.6	496
4	Base stacking controls excited-state dynamics in A•T DNA. <i>Nature</i> , 2005, 436, 1141-1144.	27.8	424
5	DNA Excited-State Dynamics:• Ultrafast Internal Conversion and Vibrational Cooling in a Series of Nucleosides. <i>Journal of the American Chemical Society</i> , 2001, 123, 10370-10378.	13.7	389
6	Ultrafast Decay of Electronically Excited Singlet Cytosine via a $\tilde{\pi},\tilde{\pi}^*$ to $nO,\tilde{\pi}^*$ State Switch. <i>Journal of the American Chemical Society</i> , 2002, 124, 6818-6819.	13.7	302
7	Quantum Control of Wave Packet Evolution with Tailored Femtosecond Pulses. <i>Physical Review Letters</i> , 1995, 74, 3360-3363.	7.8	300
8	Internal conversion to the electronic ground state occurs via two distinct pathways for pyrimidine bases in aqueous solution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 435-440.	7.1	283
9	Ultrafast Internal Conversion of Electronically Excited RNA and DNA Nucleosides in Water. <i>Journal of the American Chemical Society</i> , 2000, 122, 9348-9349.	13.7	265
10	Ultrafast Excited-State Dynamics of Adenine and Monomethylated Adenines in Solution:• Implications for the Nonradiative Decay Mechanism. <i>Journal of the American Chemical Society</i> , 2003, 125, 13594-13601.	13.7	173
11	UV excitation of single DNA and RNA strands produces high yields of exciplex states between two stacked bases. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 10285-10290.	7.1	172
12	Controlling the Future of Matter. <i>Accounts of Chemical Research</i> , 1995, 28, 133-140.	15.6	159
13	Nonradiative Decay Mechanisms in DNA Model Systems. <i>Journal of Physical Chemistry Letters</i> , 2010, 1, 2047-2053.	4.6	159
14	Pulse retrieval in frequency-resolved optical gating based on the method of generalized projections. <i>Optics Letters</i> , 1994, 19, 2152.	3.3	150
15	UV-Induced Proton Transfer between DNA Strands. <i>Journal of the American Chemical Society</i> , 2015, 137, 7059-7062.	13.7	125
16	Excited State Dynamics of Methyl Viologen. Ultrafast Photoreduction in Methanol and Fluorescence in Acetonitrile. <i>Journal of Physical Chemistry A</i> , 2001, 105, 5768-5777.	2.5	119
17	Solvent-Dependent Photophysics of 1-Cyclohexyluracil:• Ultrafast Branching in the Initial Bright State Leads Nonradiatively to the Electronic Ground State and a Long-Lived $1n\tilde{\pi}^*$ State. <i>Journal of Physical Chemistry B</i> , 2006, 110, 18641-18650.	2.6	112
18	Quantum control of I ₂ in the gas phase and in condensed phase solid Kr matrix. <i>Journal of Chemical Physics</i> , 1997, 106, 8486-8503.	3.0	111

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19	Influence of Secondary Structure on Electronic Energy Relaxation in Adenine Homopolymers. <i>Journal of Physical Chemistry B</i> , 2004, 108, 11182-11188.	2.6	110
20	Life in the light: nucleic acid photoproperties as a legacy of chemical evolution. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 24228-24238.	2.8	108
21	Broadly tunable 30-fs pulses produced by optical parametric amplification. <i>Optics Letters</i> , 1994, 19, 2000.	3.3	107
22	Ultrafast Photoionization Dynamics of Indole in Water. <i>Journal of Physical Chemistry A</i> , 1999, 103, 2460-2466.	2.5	106
23	Singlet Excited-State Dynamics of 5-Fluorocytosine and Cytosine: An Experimental and Computational Study. <i>Journal of Physical Chemistry A</i> , 2005, 109, 4431-4436.	2.5	104
24	Quantum Control of NaI Photodissociation Reaction Product States by Ultrafast Tailored Light Pulses. <i>Journal of Physical Chemistry A</i> , 1997, 101, 3815-3822.	2.5	94
25	Singlet Excited-state Lifetimes of Cytosine Derivatives Measured by Femtosecond Transient Absorption. <i>Photochemistry and Photobiology</i> , 2003, 77, 158.	2.5	93
26	Intermolecular vibrational motion in CS ₂ liquid at 165 ± 1/2 °C 300 K observed by femtosecond time-resolved impulsive stimulated scattering. <i>Chemical Physics Letters</i> , 1987, 141, 16-24.	2.6	92
27	Solvent and Solvent Isotope Effects on the Vibrational Cooling Dynamics of a DNA Base Derivative. <i>Journal of Physical Chemistry A</i> , 2007, 111, 10460-10467.	2.5	91
28	Predicting Thymine Dimerization Yields from Molecular Dynamics Simulations. <i>Biophysical Journal</i> , 2008, 94, 3590-3600.	0.5	90
29	Strickler-Berg analysis of excited singlet state dynamics in DNA and RNA nucleosides. <i>Faraday Discussions</i> , 2004, 127, 137-147.	3.2	87
30	Molecular dynamics in liquids from femtosecond time-resolved impulsive stimulated scattering. <i>IEEE Journal of Quantum Electronics</i> , 1988, 24, 470-481.	1.9	82
31	Intramolecular and intermolecular dynamics in molecular liquids through femtosecond time-resolved impulsive stimulated scattering. <i>Revue De Physique Appliquée</i> , 1987, 22, 1717-1734.	0.4	71
32	Solvent Reorganization Controls the Rate of Proton Transfer from Neat Alcohol Solvents to Singlet Diphenylcarbene. <i>Journal of the American Chemical Society</i> , 2002, 124, 6428-6438.	13.7	71
33	Phase and intensity characterization of femtosecond pulses from a chirped-pulse amplifier by frequency-resolved optical gating. <i>Optics Letters</i> , 1995, 20, 483.	3.3	64
34	Time-resolved infrared spectroscopy of the lowest triplet state of thymine and thymidine. <i>Chemical Physics</i> , 2008, 347, 383-392.	1.9	64
35	Efficient UV-induced charge separation and recombination in an 8-oxoguanine-containing dinucleotide. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 11612-11617.	7.1	64
36	Complexity of excited-state dynamics in DNA (Reply). <i>Nature</i> , 2006, 441, E8-E8.	27.8	56

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37	Femtosecond electron ejection in liquid acetonitrile: Evidence for cavity electrons and solvent anions. <i>Journal of Chemical Physics</i> , 2002, 117, 8855-8866.	3.0	55
38	Base-Stacking Disorder and Excited-State Dynamics in Single-Stranded Adenine Homo-oligonucleotides. <i>Journal of Physical Chemistry B</i> , 2012, 116, 10266-10274.	2.6	54
39	Base Stacking in Adenosine Dimers Revealed by Femtosecond Transient Absorption Spectroscopy. <i>Journal of the American Chemical Society</i> , 2014, 136, 6362-6372.	13.7	54
40	Ground-State Recovery Following UV Excitation is Much Slower in GÂ·Câ·DNA Duplexes and Hairpins Than in Mononucleotides. <i>Journal of the American Chemical Society</i> , 2008, 130, 10844-10845.	13.7	53
41	Deuterium Isotope Effect on Excited-State Dynamics in an Alternating GC Oligonucleotide. <i>Journal of the American Chemical Society</i> , 2009, 131, 17557-17559.	13.7	48
42	Sequence-dependent thymine dimer formation and photoreversal rates in double-stranded DNA. <i>Photochemical and Photobiological Sciences</i> , 2013, 12, 1431-1439.	2.9	47
43	Excited States in DNA Strands Investigated by Ultrafast Laser Spectroscopy. <i>Topics in Current Chemistry</i> , 2014, 356, 39-87.	4.0	47
44	Ultrafast nonradiative decay by hypoxanthine and several methylxanthines in aqueous and acetonitrile solution. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 10677.	2.8	46
45	Hydrogen Bond Donors Accelerate Vibrational Cooling of Hot Purine Derivatives in Heavy Water. <i>Journal of Physical Chemistry A</i> , 2013, 117, 6771-6780.	2.5	43
46	Ultrashort-pulse measurement using noninstantaneous nonlinearities: Raman effects in frequency-resolved optical gating. <i>Optics Letters</i> , 1995, 20, 486.	3.3	42
47	Influence of Different Diimine (N ^{â·}) 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·}) Ligands. <i>Journal of Physical Chemistry C</i> , 2014, 118, 23233-23246.	3.1	40
48	Excited-State Dynamics of DNA Duplexes with Different H-Bonding Motifs. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 950-954.	4.6	40
49	Ultrafast Excited-State Dynamics in Hexaethyleneglycol-Linked DNA Homoduplexes Made of AÂ·T Base Pairs. <i>Journal of the American Chemical Society</i> , 2013, 135, 10290-10293.	13.7	39
50	Interligand Electron Transfer in Heteroleptic Ruthenium(II) Complexes Occurs on Multiple Time Scales. <i>Journal of Physical Chemistry A</i> , 2015, 119, 4813-4824.	2.5	36
51	Probing the heterogeneous structure of eumelanin using ultrafast vibrational fingerprinting. <i>Nature Communications</i> , 2020, 11, 4569.	12.8	35
52	Ultrafast spectral hole burning reveals the distinct chromophores in eumelanin and their common photoresponse. <i>Chemical Science</i> , 2020, 11, 1248-1259.	7.4	34
53	From supramolecular photochemistry to the molecular computer. <i>Pure and Applied Chemistry</i> , 1992, 64, 1335-1342.	1.9	32
54	Thymine Dimer Photoreversal in Purine-Containing Trinucleotides. <i>Journal of Physical Chemistry B</i> , 2012, 116, 698-704.	2.6	32

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55	Observation of Long-Lived Excited States in DNA Oligonucleotides with Significant Base Sequence Disorder. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 133-138.	4.6	31
56	Photoinduced Electron Transfer in DNA: Charge Shift Dynamics Between 8-Oxo-Guanine Anion and Adenine. <i>Journal of Physical Chemistry B</i> , 2015, 119, 7491-7502.	2.6	31
57	Ultrafast excited-state dynamics of RNA and DNA C tracts. <i>Chemical Physics</i> , 2008, 350, 165-174.	1.9	30
58	Synchrotron radiation circular dichroism of various G-quadruplex structures. <i>Biopolymers</i> , 2010, 93, 429-433.	2.4	29
59	UV-Induced Proton-Coupled Electron Transfer in Cyclic DNA Miniduplexes. <i>Journal of the American Chemical Society</i> , 2016, 138, 7395-7401.	13.7	28
60	Ultrafast Electron Transfer Dynamics in Ruthenium Polypyridyl Complexes with a π -Conjugated Ligand. <i>Journal of Physical Chemistry B</i> , 2010, 114, 14679-14688.	2.6	27
61	Photoinduced long-lived charge transfer excited states in AT-DNA strands. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 21241-21245.	2.8	27
62	Mode-specific vibrational relaxation of photoexcited guanosine 5'-monophosphate and its acid form: a femtosecond broadband mid-IR transient absorption and theoretical study. <i>Physical Chemistry Chemical Physics</i> , 2014, 16, 1487-1499.	2.8	26
63	Electronic coupling between cytosine bases in DNA single strands and i-motifs revealed from synchrotron radiation circular dichroism experiments. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 3426.	2.8	25
64	The Excited-State Lifetimes in a G-C DNA Duplex are Nearly Independent of Helix Conformation and Base Pairing Motif. <i>ChemPhysChem</i> , 2009, 10, 1421-1425.	2.1	24
65	Crystallization kinetics of cerium oxide nanoparticles formed by spontaneous, room-temperature hydrolysis of cerium(IV) ammonium nitrate in light and heavy water. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 3523-3531.	2.8	24
66	Decay Pathways of Thymine Revisited. <i>Journal of Physical Chemistry A</i> , 2018, 122, 4819-4828.	2.5	23
67	Ultrafast Hydrolysis of a Lewis Photoacid. <i>Journal of Physical Chemistry B</i> , 2015, 119, 2737-2748.	2.6	19
68	Two-photon absorption spectra of fluorescent isomorphous DNA base analogs. <i>Biomedical Optics Express</i> , 2018, 9, 447.	2.9	19
69	Intermolecular Hydrogen Bonding Modulates O-H Photodissociation in Molecular Aggregates of a Catechol Derivative. <i>Photochemistry and Photobiology</i> , 2019, 95, 163-175.	2.5	19
70	Ultrafast Carbonylcarbene Formation and Spin-Equilibration. <i>Journal of the American Chemical Society</i> , 2000, 122, 8087-8088.	13.7	18
71	Ultrafast Excited-State Dynamics and Vibrational Cooling of 8-Oxo-7,8-dihydro-2'-deoxyguanosine in D ₂ O. <i>Journal of Physical Chemistry A</i> , 2013, 117, 12851-12857.	2.5	18
72	Excited-State Dynamics of Melamine and Its Lysine Derivative Investigated by Femtosecond Transient Absorption Spectroscopy. <i>Molecules</i> , 2016, 21, 1645.	3.8	15

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73	On the origin of multiexponential fluorescence decays from 2-aminopurine-labeled dinucleotides. <i>Journal of Chemical Physics</i> , 2016, 145, 155101.	3.0	14
74	Effects of Intra- and Intermolecular Hydrogen Bonding on O-H Bond Photodissociation Pathways of a Catechol Derivative. <i>Journal of Physical Chemistry A</i> , 2019, 123, 5356-5366.	2.5	14
75	Time-Resolved Vibrational Fingerprints for Two Silver Cluster-DNA Fluorophores. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 8958-8963.	4.6	14
76	Catechol-Based Molecular Memory Film for Redox Linked Bioelectronics. <i>Advanced Electronic Materials</i> , 2020, 6, 2000452.	5.1	14
77	Solvent-Dependent Stabilization of a Charge Transfer State is the Key to Ultrafast Triplet State Formation in an Epigenetic DNA Nucleoside. <i>Chemistry - A European Journal</i> , 2021, 27, 10932-10940.	3.3	14
78	Excited State Relaxation of Neutral and Basic 8-Oxoguanine. <i>Journal of Physical Chemistry B</i> , 2015, 119, 8293-8301.	2.6	12
79	Probing eumelanin photoprotection using a catechol:quinone heterodimer model system. <i>Faraday Discussions</i> , 2019, 216, 520-537.	3.2	11
80	Photoreductive dissolution of cerium oxide nanoparticles and their size-dependent absorption properties. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 5756-5764.	2.8	11
81	Holography in frequency selective media II: Controlling the diffraction efficiency. <i>Journal of Luminescence</i> , 1992, 53, 215-218.	3.1	9
82	Ultrafast photochemical dynamics of the hexaaquairon(III) ion. <i>Chemical Physics Letters</i> , 2017, 683, 315-321.	2.6	9
83	Excited-State Dynamics of a DNA Duplex in a Deep Eutectic Solvent Probed by Femtosecond Time-Resolved IR Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2018, 122, 2437-2444.	2.5	9
84	Isotopic substitution affects excited state branching in a DNA duplex in aqueous solution. <i>Chemical Communications</i> , 2019, 55, 4174-4177.	4.1	8
85	A single nucleobase tunes nonradiative decay in a DNA-bound silver cluster. <i>Journal of Chemical Physics</i> , 2021, 155, 094305.	3.0	8
86	Symposium-in-Print: DNA Photodynamics Introduction. <i>Photochemistry and Photobiology</i> , 2007, 83, 592-594.	2.5	7
87	Subnanosecond Emission Dynamics of AT DNA Oligonucleotides. <i>ChemPhysChem</i> , 2016, 17, 3558-3569.	2.1	7
88	Excited-state dynamics of mononucleotides and DNA strands in a deep eutectic solvent. <i>Faraday Discussions</i> , 2018, 207, 267-282.	3.2	7
89	Holographic method for determining the spatial extent of photochemistry: Room-temperature photopolymerization of diacetylene TS6. <i>Chemical Physics Letters</i> , 1986, 125, 251-256.	2.6	6
90	Femtosecond molecular dynamics of liquid carbon disulphide at high pressure. <i>Journal of Physics Condensed Matter</i> , 1990, 2, SA109-SA113.	1.8	6

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91	Ultrafast excited state dynamics of silver ion-mediated cytosine-cytosine base pairs in metallo-DNA. <i>Journal of Chemical Physics</i> , 2020, 153, 105104.	3.0	6
92	Photocrosslinking between nucleic acids and proteins: general discussion. <i>Faraday Discussions</i> , 2018, 207, 283-306.	3.2	5
93	Ultrafast Electron Injection and Recombination Dynamics of Coumarin 343-Sensitized Cerium Oxide Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2021, 125, 14827-14835.	3.1	5
94	Ultrafast Excited-State Deactivation of the Bacterial Pigment Violacein. <i>Journal of Physical Chemistry B</i> , 2017, 121, 7855-7861.	2.6	4
95	Photo-protection/photo-damage in natural systems: general discussion. <i>Faraday Discussions</i> , 2019, 216, 538-563.	3.2	4
96	DNA-like Photophysics in Self-Assembled Silver(I)-Nucleobase Nanofibers. <i>Journal of Physical Chemistry B</i> , 2019, 123, 5985-5994.	2.6	4
97	Molecular Dynamics Simulations of 2-Aminopurine-Labeled Dinucleoside Monophosphates Reveal Multiscale Stacking Kinetics. <i>Journal of Physical Chemistry B</i> , 2019, 123, 2291-2304.	2.6	4
98	Orthogonal Redox and Optical Stimuli Can Induce Independent Responses for Catechol-Chitosan Films. <i>Materials Chemistry Frontiers</i> , 0, , .	5.9	3
99	Light induced charge and energy transport in nucleic acids and proteins: general discussion. <i>Faraday Discussions</i> , 2018, 207, 153-180.	3.2	1
100	Ultrafast photoinduced energy and charge transfer: concluding remarks. <i>Faraday Discussions</i> , 2019, 216, 564-573.	3.2	1
101	Energy and charge-transfer in natural photosynthesis: general discussion. <i>Faraday Discussions</i> , 2019, 216, 133-161.	3.2	1
102	Fast Spectroscopy of Biosystems. <i>ChemPhysChem</i> , 2016, 17, 1218-1219.	2.1	0
103	Light induced damage and repair in nucleic acids and proteins: general discussion. <i>Faraday Discussions</i> , 2018, 207, 389-408.	3.2	0
104	Bionanophotonics: general discussion. <i>Faraday Discussions</i> , 2018, 207, 491-512.	3.2	0
105	Photovoltaics and bio-inspired light harvesting: general discussion. <i>Faraday Discussions</i> , 2019, 216, 269-300.	3.2	0