Hideki Hashimoto

List of Publications by Year
in descending order

74	2,111	218677	243625
papers	citations	26 h-index	44 g-index

76	76	76	1702
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ï€-Topology and ultrafast excited-state dynamics of remarkably photochemically stabilized pentacene derivatives with radical substituents. Physical Chemistry Chemical Physics, 2022, 24, 13514-13518.	2.8	2
2	Ultrafast laser spectroscopic studies on carotenoids in solution and on those bound to photosynthetic pigment-protein complexes. Methods in Enzymology, 2022, , .	1.0	2
3	Hydroquinone redox mediator enhances the photovoltaic performances of chlorophyll-based bio-inspired solar cells. Communications Chemistry, 2021, 4, .	4.5	10
4	Development of highly active hydrogen evolution reaction (HER) catalysts composed of reduced graphene oxide and amorphous molybdenum sulfides derived from (NH4)2MoOmS4-m (mâ€¯=â€¯0, 1, and 2). Journal of Photochemistry and Photobiology A: Chemistry, 2020, 401, 112793.	3.9	6
5	Photoprotective mechanisms in the core LH1 antenna pigment-protein complex from the purple photosynthetic bacterium, Rhodospirillum rubrum. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 400, 112628.	3.9	10
6	Operando time-resolved diffuse reflection spectroscopy: The origins of photocatalytic water-oxidation activity of bismuth vanadate. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 395, 112493.	3.9	2
7	Particle size effects of tetrahedron-shaped Ag3PO4 photocatalyst on water-oxidation activity and carrier recombination dynamics. Chemical Physics Letters: X, 2019, 737, 100023.	2.1	7
8	Understanding/unravelling carotenoid excited singlet states. Journal of the Royal Society Interface, 2018, 15, 20180026.	3.4	81
9	Synthesis of amorphous Fe2O3/RGO composite and its application to photoinduced hydrogen evolution. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 353, 631-638.	3.9	15
10	Surface and bulk carrier recombination dynamics of rutile type TiO2 powder as revealed by sub-ns time-resolved diffuse reflection spectroscopy. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 358, 452-458.	3.9	8
11	Correlation between surface carrier dynamics and water oxidation activity of commercially available rutile-type TiO2 powders. Chemical Physics Letters, 2018, 712, 123-127.	2.6	2
12	Unified analysis of optical absorption spectra of carotenoids based on a stochastic model. Archives of Biochemistry and Biophysics, 2018, 650, 49-58.	3.0	13
13	Singlet and triplet excited states dynamics of photosynthetic pigment chlorophyll a investigated by sub-nanosecond pump-probe spectroscopy. Journal of Photochemistry and Photobiology A: Chemistry, 2018, 358, 374-378.	3.9	17
14	Excited state properties of Î²-carotene analogs incorporating a lactone ring. Physical Chemistry Chemical Physics, 2017, 19, 3000-3009.	2.8	4
15	Strategies to enhance the excitation energy-transfer efficiency in a light-harvesting system using the intra-molecular charge transfer character of carotenoids. Faraday Discussions, 2017, 198, 59-71.	3.2	7
16	Challenges facing an understanding of the nature of low-energy excited states in photosynthesis. Biochimica Et Biophysica Acta - Bioenergetics, 2016, 1857, 1627-1640.	1.0	74
17	Carotenoids and Photosynthesis. Sub-Cellular Biochemistry, 2016, 79, 111-139.	2.4	191
18	Photoprotection Mechanism of Light-Harvesting Antenna Complex from Purple Bacteria. Journal of Physical Chemistry B, 2016, 120, 951-956.	2.6	29

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19	Redox Properties and Catalytic Ability toward Electrochemical Proton Reduction of Sulfur-Bridged Trinuclear Mo3S4 Complexes Containing Acetate, Trifluoroacetate, and/or Dithiophosphate as Bridging Ligands. Bulletin of the Chemical Society of Japan, 2015, 88, 565-571.	3.2	1
20	Syntheses and Catalytic Ability of Sugar-Incorporated N-Heterocyclic Carbene Pincer Pd Complexes Possessing Various N-Substituents. Bulletin of the Chemical Society of Japan, 2015, 88, 1135-1143.	3.2	12
21	Syntheses and Redox Properties of Complexes with Mo3S4 Cores and Tridentate Schiff Base Ligands. Bulletin of the Chemical Society of Japan, 2015, 88, 292-299.	3.2	3
22	Direct monitoring of bias-dependent variations in the exciton formation ratio of working organic light emitting diodes. Scientific Reports, 2015, 5, 15533.	3.3	6
23	Natural and artificial light-harvesting systems utilizing the functions of carotenoids. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2015, 25, 46-70.	11.6	63
24	Ultrafast time-resolved vibrational spectroscopies of carotenoids in photosynthesis. Biochimica Et Biophysica Acta - Bioenergetics, 2015, 1847, 69-78.	1.0	22
25	Excitedâ€State Dynamics of Pentacene Derivatives with Stable Radical Substituents. Angewandte Chemie - International Edition, 2014, 53, 6715-6719.	13.8	44
26	Elucidation and Control of an Intramolecular Charge Transfer Property of Fucoxanthin by a Modification of Its Polyene Chain Length. Journal of Physical Chemistry Letters, 2014, 5, 792-797.	4.6	30
27	Origin of Stark Signals Induced by Continuous Photoirradiation for Working Dye-Sensitized Solar Cells Revealed by Photoinduced Absorption Measurements. Journal of Physical Chemistry C, 2014, 118, 17260-17265.	3.1	6
28	Characterization of the intramolecular transfer state of marine carotenoid fucoxanthin by femtosecond pumpâ€“probe spectroscopy. Photosynthesis Research, 2014, 121, 61-68.	2.9	19
29	Roles of allene-group in an intramolecular charge transfer character of a short fucoxanthin homolog as revealed by femtosecond pump-probe spectroscopy. Chemical Physics Letters, 2014, 602, 75-79.	2.6	13
30	Photochemical Reduction of CO2 with Red Light Using Synthetic Chlorophyllâ€“Rhenium Bipyridine Dyad. Chemistry Letters, 2014, 43, 1383-1385.	1.3	25
31	Incorporation of a Sugar Unit into a Câ€“Câ€“N Pincer Pd Complex Using Click Chemistry and Its Dynamic Behavior in Solution and Catalytic Ability toward the Suzukiâ€“Miyaura Coupling in Water. Chemistry Letters, 2014, 43, 687-689.	1.3	24
32	Ultrafast excited state dynamics of spirilloxanthin in solution and bound to core antenna complexes: Identification of the S* and T1 states. Journal of Chemical Physics, 2012, 137, 064505.	3.0	26
33	Spectroscopic investigation of charge injection process in the bulk-heterojunction P3HT:PCBM solar cell. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 2395-2398.	0.8	1
34	Displacement current induced by spin resonance in air-treated conjugated polymer diodes. Physical Review B, 2012, 86, .	3.2	8
35	Ultrafast photoexcitation dynamics of Ï€-conjugated bodipy-anthracene-radical triad system. RSC Advances, 2012, 2, 5150.	3.6	20
36	Ultrafast excited state dynamics of fucoxanthin: excitation energy dependent intramolecular charge transfer dynamics. Physical Chemistry Chemical Physics, 2011, 13, 10762.	2.8	39

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37	The dependence of excitation energy transfer pathways on conjugation length of carotenoids in purple bacterial photosynthetic antennae. Physica Status Solidi (B): Basic Research, 2011, 248, 403-407.	1.5	9
38	Control of coherent vibronic oscillations in Î²â€carotene by ultrashort laser pulses. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 151-154.	0.8	4
39	Morphology dependent exciton formation in regioregular poly(3-alkyl)thiophenes. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 88-91.	0.8	2
40	Ultrafast excited state dynamics of monomeric bacteriochlorophyll a. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 92-95.	0.8	14
41	Strong coherent coupling of vibronic oscillations in spheroidene. Physics Procedia, 2011, 13, 74-77.	1.2	3
42	Ultrafast S1 and ICT state dynamics of a marine carotenoid probed by femtosecond one- and two-photon pump-probe spectroscopy. Journal of Luminescence, 2011, 131, 515-518.	3.1	27
43	Spectroscopic investigation of excitons, photocarriers, and bias-induced carriers in regioregular poly(3-alkylthiophene). Physical Review B, 2011, 83, .	3.2	14
44	Direct optical probing of negative carriers from an operating [6,6]-phenyl C61 butyric acid methyl ester diode. Applied Physics Letters, 2010, 97, .	3.3	8
45	Comparison of transient grating signals from spheroidene in an organic solvent and in pigment-protein complexes fromRhodobacter sphaeroides2.4.1. Physical Review B, 2010, 81, .	3.2	21
46	Excitation-energy dependence of transient grating spectroscopy in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î²</mml:mi></mml:math>-carotene. Physical Review B, 2009, 80, .	3.2	22
47	Ultrafast Nonlinear Optical Responses Induced by Multiphoton Excitation in All-trans-Î²-Carotene: Nonresonant Excitation to the Optically Allowed S2State. Journal of the Physical Society of Japan, 2009, 78, 104715.	1.6	19
48	Temperature dependence of intra-chain photoluminescence of a long oligothiophene. Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, 193-196.	0.8	1
49	Ultrafast coherent vibronic oscillations in regioregular poly(3-alkylthiophene). Physica Status Solidi C: Current Topics in Solid State Physics, 2009, 6, S46-S49.	0.8	4
50	Transient grating spectroscopy in photosynthetic purple bacteria Rhodobacter sphaeroides 2.4.1. Journal of Luminescence, 2009, 129, 1908-1911.	3.1	5
51	One- and two-photon pumpâ€“probe optical spectroscopic measurements reveal the S1 and intramolecular charge transfer states are distinct in fucoxanthin. Chemical Physics Letters, 2009, 483, 95-100.	2.6	59
52	Four-wave mixing signals from Î²-carotene and its nÂ=Â15 homologue. Photosynthesis Research, 2008, 95, 299-308.	2.9	20
53	Energy dissipation in the ground-state vibrational manifolds of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î²</mml:mi></mml:math>-carotene homologues: A sub-20-fs time-resolved transient grating spectroscopic study. Physical Review B, 2008, 77, .	3.2	31
54	Large third-order optical nonlinearity realized in symmetric nonpolar carotenoids. Physical Review B, 2008, 78, .	3.2	7

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55	Unified explanation for linear and nonlinear optical responses inÎ²-carotene: A sub-20â˜fsdegenerate four-wave mixing spectroscopic study. Physical Review B, 2007, 75, .	3.2	57
56	Symmetry Control of Radiative Decay in Linear Polyenes:Â Low Barriers for Isomerization in the S1State of Hexadecaheptaene. Journal of the American Chemical Society, 2007, 129, 1769-1775.	13.7	27
57	Structures and functions of carotenoids bound to reaction centers from purple photosynthetic bacteria. Pure and Applied Chemistry, 2006, 78, 1505-1518.	1.9	8
58	Intrachain photoluminescence properties of conjugated polymers as revealed by long oligothiophenes and polythiophenes diluted in an inactive solid matrix. Physical Review B, 2006, 73, .	3.2	44
59	Excitation energy dependence of excited states dynamics in all-trans-carotenes determined by femtosecond absorption and fluorescence spectroscopy. Chemical Physics Letters, 2005, 408, 89-95.	2.6	48
60	Low-lying singlet states of carotenoids having 8â€“13 conjugated double bonds as determined by electronic absorption spectroscopy. Chemical Physics Letters, 2005, 410, 108-114.	2.6	30
61	Electroabsorption spectroscopy ofÎ²-carotene homologs: Anomalous enhancement ofÎ”Î¼. Physical Review B, 2005, 71, .	3.2	25
62	Effect of inhomogeneous band broadening on the nonlinear optical properties of hydrazones. Physical Review B, 2004, 69, .	3.2	6
63	Pumpâ˜Depleteâ˜Probe Spectroscopy and the Puzzle of Carotenoid Dark States. Journal of Physical Chemistry B, 2004, 108, 3320-3325.	2.6	115
64	The very early events following photoexcitation of carotenoids. Archives of Biochemistry and Biophysics, 2004, 430, 61-69.	3.0	50
65	Origin of transition dipole-moment polarizability and hyperpolarizability in hydrazones. Physical Review B, 2003, 67, .	3.2	22
66	Femtosecond Time-Resolved Raman Signals on Ultrafast Dynamics in All-trans-Î²-Carotene. Bulletin of the Chemical Society of Japan, 2002, 75, 949-955.	3.2	36
67	The 1Bu+, 1Bu-, and 2Ag-Energies of Crystalline Lycopene, Î²-Carotene, and Mini-9-Î²-carotene as Determined by Resonance-Raman Excitation Profiles:Â Dependence of the 1Bu-State Energy on the Conjugation Length. Journal of Physical Chemistry B, 2000, 104, 5011-5019.	2.6	143
68	The 2Agâ˜ energy of crystalline all-trans-spheroidene as determined by resonance-Raman excitation profiles. Chemical Physics Letters, 1998, 290, 36-42.	2.6	45
69	Mechanism Activating the 21Ag State in all-trans-Î²-Carotene Crystal to Resonance Raman Scattering. Japanese Journal of Applied Physics, 1997, 36, L916-L918.	1.5	19
70	Isolation by high-pressure liquid chromatography of the cis-trans isomers of .beta.-apo-8'-carotenal. Determination of their S0-state configurations by NMR spectroscopy and prediction of their S1- and T1-state configurations by transient Raman spectroscopy. Journal of the American Chemical Society, 1993, 115, 9216-9225.	13.7	35
71	S1 and T1 species of .beta.-carotene generated by direct photoexcitation from the all-trans, 9-cis, 13-cis, and 15-cis isomers as revealed by picosecond transient absorption and transient Raman spectroscopies. The Journal of Physical Chemistry, 1991, 95, 3072-3076.	2.9	91
72	Raman spectra of all-trans-Î²-carotene in the S1 and T1 states produced by direct photoexcitation. Chemical Physics Letters, 1989, 163, 251-256.	2.6	69

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73	The Cî—»C stretching Raman lines of [Î²-carotene isomers in the S1 state as detected by pump-probe resonance Raman spectroscopy. Chemical Physics Letters, 1989, 154, 321-325.	2.6	99
74	Raman spectra of all-trans-Î²-apo-8â€²-carotenal in the S1 and T1 states; a picosecond pump-and-probe technique using ML-Qs pulse trains. Chemical Physics Letters, 1989, 162, 523-527.	2.6	27