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	Carotenoids and Photosynthesis. Sub-Cellular Biochemistry, 2016, 79, 111-139.	2.4	191
2	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
3	Pumpâ^'Depleteâ^'Probe Spectroscopy and the Puzzle of Carotenoid Dark States. Journal of Physical Chemistry B, 2004, 108, 3320-3325.	2.6	115
4	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
5	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
6	Understanding/unravelling carotenoid excited singlet states. Journal of the Royal Society Interface, 2018, 15, 20180026.	3.4	81
7	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
8	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
9	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
10	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
11	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
12	The very early events following photoexcitation of carotenoids. Archives of Biochemistry and Biophysics, 2004, 430, 61-69.	3.0	50
13	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
14	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
15	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
16	Excitedâ€State Dynamics of Pentacene Derivatives with Stable Radical Substituents. Angewandte Chemie - International Edition, 2014, 53, 6715-6719.	13.8	44
17	Ultrafast excited state dynamics of fucoxanthin: excitation energy dependent intramolecular charge transfer dynamics. Physical Chemistry Chemical Physics, 2011, 13, 10762.	2.8	39
18	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

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19	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
20	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
21	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
22	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
23	Photoprotection Mechanism of Light-Harvesting Antenna Complex from Purple Bacteria. Journal of Physical Chemistry B, 2016, 120, 951-956.	2.6	29
24	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
25	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
26	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
27	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
28	Electroabsorption spectroscopy ofÎ²-carotene homologs: Anomalous enhancement ofÎ”Î¼. Physical Review B, 2005, 71, .	3.2	25
29	Photochemical Reduction of CO2 with Red Light Using Synthetic Chlorophyllâ€“Rhenium Bipyridine Dyad. Chemistry Letters, 2014, 43, 1383-1385.	1.3	25
30	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
31	Origin of transition dipole-moment polarizability and hyperpolarizability in hydrazones. Physical Review B, 2003, 67, .	3.2	22
32	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
33	Ultrafast time-resolved vibrational spectroscopies of carotenoids in photosynthesis. Biochimica Et Biophysica Acta - Bioenergetics, 2015, 1847, 69-78.	1.0	22
34	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
35	Four-wave mixing signals from Î²-carotene and its nÂ=Â15 homologue. Photosynthesis Research, 2008, 95, 299-308.	2.9	20
36	Ultrafast photoexcitation dynamics of Ï€-conjugated bodipy-anthracene-radical triad system. RSC Advances, 2012, 2, 5150.	3.6	20

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37	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
38	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
39	Characterization of the intramolecular transfer state of marine carotenoid fucoxanthin by femtosecond pumpâ€“probe spectroscopy. Photosynthesis Research, 2014, 121, 61-68.	2.9	19
40	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
41	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
42	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
43	Spectroscopic investigation of excitons, photocarriers, and bias-induced carriers in regioregular poly(3-alkylthiophene). Physical Review B, 2011, 83, .	3.2	14
44	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
45	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
46	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
47	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
48	Hydroquinone redox mediator enhances the photovoltaic performances of chlorophyll-based bio-inspired solar cells. Communications Chemistry, 2021, 4, .	4.5	10
49	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
50	Structures and functions of carotenoids bound to reaction centers from purple photosynthetic bacteria. Pure and Applied Chemistry, 2006, 78, 1505-1518.	1.9	8
51	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
52	Displacement current induced by spin resonance in air-treated conjugated polymer diodes. Physical Review B, 2012, 86, .	3.2	8
53	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
54	Large third-order optical nonlinearity realized in symmetric nonpolar carotenoids. Physical Review B, 2008, 78, .	3.2	7

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55	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
56	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
57	Effect of inhomogeneous band broadening on the nonlinear optical properties of hydrazones. Physical Review B, 2004, 69, .	3.2	6
58	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
59	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
60	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
61	Transient grating spectroscopy in photosynthetic purple bacteria Rhodobacter sphaeroides 2.4.1. Journal of Luminescence, 2009, 129, 1908-1911.	3.1	5
62	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
63	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
64	Excited state properties of Î²-carotene analogs incorporating a lactone ring. Physical Chemistry Chemical Physics, 2017, 19, 3000-3009.	2.8	4
65	Strong coherent coupling of vibronic oscillations in spheroidene. Physics Procedia, 2011, 13, 74-77.	1.2	3
66	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
67	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
68	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
69	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
70	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
71	Ultrafast laser spectroscopic studies on carotenoids in solution and on those bound to photosynthetic pigment-protein complexes. Methods in Enzymology, 2022, , .	1.0	2
72	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

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73	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
74	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