Nagatoshi Koumura

List of Publications by Year in Descending Order

79 papers	7,555 citations	32 h-index	86 g-index
89 ext. papers	8,056 ext. citations	9.4 avg, IF	5.57 L-index

#	Paper	IF	Citations
79	Aerobic Dehydrogenative Coupling of Naphthols and Phenols with a Ru(OH)x/Al2O3 Catalyst under Continuous-Flow Conditions. *ChemistrySelect*, **2021**, 6, 10106-10110	1.8	
78	Stereoretentive N-Arylation of Amino Acid Esters with Cyclohexanones Utilizing a Continuous-Flow System. *Chemistry - A European Journal*, **2021**, 27, 10844-10848	4.8	1
77	Zirconium Oxide-Catalyzed Direct Amidation of Unactivated Esters under Continuous-Flow Conditions. *Advanced Synthesis and Catalysis*, **2021**, 363, 2529-2535	5.6	7
76	Development of highly efficient Friedel-Crafts alkylations with alcohols using heterogeneous catalysts under continuous-flow conditions.. *RSC Advances*, **2021**, 11, 24424-24428	3.7	0
75	The Effect of the Dielectric Environment on Electron Transfer Reactions at the Interfaces of Molecular Sensitized Semiconductors in Electrolytes. *Journal of Physical Chemistry C*, **2020**, 124, 6979-6992	3.8	4
74	Continuous Synthesis of Aryl Amines from Phenols Utilizing Integrated Packed-Bed Flow Systems. *Angewandte Chemie - International Edition*, **2020**, 59, 15891-15896	16.4	8
73	Robust Organic Photosensitizers Immobilized on a Vinylimidazolium Functionalized Support for Singlet Oxygen Generation under Continuous-Flow Conditions. *Synlett*, **2020**, 31, 497-501	2.2	2
72	Continuous Synthesis of Aryl Amines from Phenols Utilizing Integrated Packed-Bed Flow Systems. *Angewandte Chemie*, **2020**, 132, 16025-16030	3.6	1
71	Readily Available Immobilized Pd Catalysts for Suzuki-Miyaura Coupling under Continuous-flow Conditions. *ChemCatChem*, **2019**, 11, 2427-2431	5.2	11
70	Development of Next-Generation Organic-Based Solar Cells: Studies on Dye-Sensitized and Perovskite Solar Cells. *Advanced Energy Materials*, **2019**, 9, 1802967	21.8	29
69	Flow fine synthesis with heterogeneous catalysts. *Tetrahedron*, **2018**, 74, 1705-1730	2.4	86
68	Exploiting Intermolecular Interactions between Alkyl-Functionalized Redox-Active Molecule Pairs to Enhance Interfacial Electron Transfer. *Journal of the American Chemical Society*, **2018**, 140, 13935-13944	16.4	12
67	Discovery of S□□C?N Intramolecular Bonding in a Thiophenylcyanoacrylate-Based Dye: Realizing Charge Transfer Pathways and Dye□□TiO Anchoring Characteristics for Dye-Sensitized Solar Cells. *ACS Applied Materials & Interfaces*, **2017**, 9, 25952-25961	9.5	16
66	Structural Effects of the Donor Moiety on Reduction Kinetics of Oxidized Dye in Dye-Sensitized Solar Cells. *Journal of Physical Chemistry C*, **2016**, 120, 3612-3618	3.8	16
65	Synthesis of Oligo(thienylene-vinylene) by Regiocontrolled Deprotonative Cross-Coupling. *Organic Letters*, **2016**, 18, 650-3	6.2	6
64	An Alkyloxyphenyl Group as a Sterically Hindered Substituent on a Triphenylamine Donor Dye for Effective Recombination Inhibition in Dye-Sensitized Solar Cells. *Langmuir*, **2016**, 32, 1178-83	4	18
63	Influence of the non-conjugated 5-position substituent of 1,3,5-triaryl-2-pyrazoline-based photosensitizers on the photophysical properties and performance of a dye-sensitized solar cell. *RSC Advances*, **2016**, 6, 13964-13970	3.7	17

62	Selective encapsulation of cesium ions using the cyclic peptide moiety of surfactin: Highly efficient removal based on an aqueous giant micellar system. *Colloids and Surfaces B: Biointerfaces*, **2015**, 134, 59-64	6	13
61	Structural effect of donor in organic dye on recombination in dye-sensitized solar cells with cobalt complex electrolyte. *Langmuir*, **2014**, 30, 2274-9	4	42
60	Crown Ether-Substituted Carbazole Dye for Dye-Sensitized Solar Cells: Controlling the Local Ion Concentration at the TiO2/Dye/Electrolyte Interface. *Journal of Physical Chemistry C*, **2014**, 118, 16749-16759	3.8	16
59	Intermolecular interactions between a Ru complex and organic dyes in cosensitized solar cells: a computational study. *Physical Chemistry Chemical Physics*, **2014**, 16, 16166-75	3.6	8
58	Carbazole dye with phosphonic acid anchoring groups for long-term heat stability of dye-sensitized solar cells. *Electrochimica Acta*, **2014**, 131, 174-183	6.7	25
57	Deceleration of dye cation reduction kinetics by adding alkyl chains to the π-conjugated linker of dye molecules. *Japanese Journal of Applied Physics*, **2014**, 53, 127301	1.4	7
56	Photo-induced oxidation of polythiophene derivatives: Dependence on side chain structure. *Polymer Degradation and Stability*, **2013**, 98, 899-903	4.7	22
55	Visible-light-induced water splitting based on two-step photoexcitation between dye-sensitized layered niobate and tungsten oxide photocatalysts in the presence of a triiodide/iodide shuttle redox mediator. *Journal of the American Chemical Society*, **2013**, 135, 16872-84	16.4	203
54	Improvement of TiO2/dye/electrolyte interface conditions by positional change of alkyl chains in modified panchromatic Ru complex dyes. *Chemistry - A European Journal*, **2013**, 19, 1028-34	4.8	35
53	Development of Carbazole Dyes for Efficient Molecular Photovoltaics. *Heterocycles*, **2013**, 87, 275	0.8	29
52	Recombination inhibitive structure of organic dyes for cobalt complex redox electrolytes in dye-sensitised solar cells. *Journal of Materials Chemistry A*, **2013**, 1, 792-798	13	38
51	Alternation of Charge Injection and Recombination in Dye-Sensitized Solar Cells by the Addition of Nonconjugated Bridge to Organic Dyes. *Journal of Physical Chemistry C*, **2013**, 117, 2024-2031	3.8	31
50	An Increase in Energy Conversion Efficiency by Decreasing Cobalt Redox Electrolyte Diffusion Resistance in Dye-sensitized Solar Cells. *Chemistry Letters*, **2013**, 42, 453-454	1.7	10
49	Cosensitization of Cyclometalated Ruthenium Complex and Organic Dyes for High-efficiency Dye-sensitized Solar Cells. *Chemistry Letters*, **2013**, 42, 1371-1373	1.7	9
48	Organic dyes with oligo-n-hexylthiophene for dye-sensitized solar cells: Relation between chemical structure of donor and photovoltaic performance. *Dyes and Pigments*, **2012**, 92, 1250-1256	4.6	32
47	Aqueous dye-sensitized solar cell electrolytes based on the ferricyanide-ferrocyanide redox couple. *Advanced Materials*, **2012**, 24, 1222-5	24	105
46	Synthesis and Properties of Anthrylene-Substituted Phenyleneethynylene Dyes Having Amino/Cyano Group(s) and Their Application to Dye-Sensitized Solar Cells. *Bulletin of the Chemical Society of Japan*, **2012**, 85, 687-697	5.1	13
45	Dye regeneration kinetics in dye-sensitized solar cells. *Journal of the American Chemical Society*, **2012**, 134, 16925-8	16.4	202

44	Carbazole Dyes with Ether Groups for Dye-Sensitized Solar Cells: Effect of Negative Charges in Dye Molecules on Electron Lifetime. *Japanese Journal of Applied Physics*, **2012**, 51, 10NE14	1.4	2
43	Carbazole Dyes with Ether Groups for Dye-Sensitized Solar Cells: Effect of Negative Charges in Dye Molecules on Electron Lifetime. *Japanese Journal of Applied Physics*, **2012**, 51, 10NE14	1.4	2
42	Synthesis and Properties of 9,10-Anthrylene-substituted Phenyleneethynylene Dyes for Dye-sensitized Solar Cell. *Chemistry Letters*, **2011**, 40, 620-622	1.7	14
41	Carbazole Dyes with Alkyl-functionalized Thiophenes for Dye-sensitized Solar Cells: Relation between Alkyl Chain Length and Photovoltaic Performance. *Chemistry Letters*, **2011**, 40, 872-873	1.7	32
40	Synthesis and Properties of Seleno-analog MK-organic Dye for Photovoltaic Cells Prepared by CH Functionalization Reactions of Selenophene Derivatives. *Chemistry Letters*, **2011**, 40, 922-924	1.7	30
39	Concerted effect of large molecular dyes and bulky cobalt complex redox couple to retard recombination in dye-sensitized solar cells. *Electrochemistry Communications*, **2011**, 13, 778-780	5.1	26
38	Ph2P(O) Group for Protection of Terminal Acetylenes. *Synlett*, **2011**, 2011, 2402-2406	2.2	4
37	Tuning of solubility and gelation ability of oligomeric electrolyte by anion exchange. *Polymer Journal*, **2010**, 42, 759-765	2.7	9
36	Organic Dyes Containing Thieno[3,2-b]indole Donor for Efficient Dye-Sensitized Solar Cells. *Journal of Physical Chemistry C*, **2010**, 114, 18283-18290	3.8	91
35	Iterative Extension of Thiophene Ring Leading to Head-to-Tail-Type Oligothiophenes via Stepwise CH Arylation and Halogen Exchange Sequence. *Heterocycles*, **2010**, 82, 505	0.8	19
34	Development of Carbazole Dyes for Efficient Molecular Photovoltaics. *Yuki Gosei Kagaku Kyokaishi/Journal of Synthetic Organic Chemistry*, **2010**, 68, 399-408	0.2	2
33	Organic Sensitizers Based on Hexylthiophene-Functionalized Indolo[3,2-b]carbazole for Efficient Dye-Sensitized Solar Cells. *Journal of Physical Chemistry C*, **2009**, 113, 13409-13415	3.8	109
32	Substituted carbazole dyes for efficient molecular photovoltaics: long electron lifetime and high open circuit voltage performance. *Journal of Materials Chemistry*, **2009**, 19, 4829		121
31	Stepwise construction of head-to-tail-type oligothiophenes via iterative palladium-catalyzed CH arylation and halogen exchange. *Organic Letters*, **2009**, 11, 2297-300	6.2	67
30	Highly stable sensitizer dyes for dye-sensitized solar cells: role of the oligothiophene moiety. *Energy and Environmental Science*, **2009**, 2, 542	35.4	98
29	Exploitation of Ionic Liquid Electrolyte for Dye-Sensitized Solar Cells by Molecular Modification of Organic-Dye Sensitizers. *Chemistry of Materials*, **2009**, 21, 2810-2816	9.6	75
28	Long-term stability of organic dye-sensitized solar cells based on an alkyl-functionalized carbazole dye. *Energy and Environmental Science*, **2009**, 2, 1109	35.4	100
27	Hexylthiophene-Functionalized Carbazole Dyes for Efficient Molecular Photovoltaics: Tuning of Solar-Cell Performance by Structural Modification. *Chemistry of Materials*, **2008**, 20, 3993-4003	9.6	582

26	Interfacial electron-transfer kinetics in metal-free organic dye-sensitized solar cells: combined effects of molecular structure of dyes and electrolytes. *Journal of the American Chemical Society*, **2008**, 130, 17874-81	16.4	256
25	Hydrogels Based on Surfactant-Free Ionene Polymers with N,N?-(p-Phenylene)dibenzamide Linkages. *Macromolecules*, **2008**, 41, 8841-8846	5.5	32
24	Alkyl-Functionalized Organic Dyes for Efficient Molecular Photovoltaics [J. Am. Chem. Soc.2006,128, 14256□14257].. *Journal of the American Chemical Society*, **2008**, 130, 4202-4203	16.4	33
23	Light-driven rotary molecular motors on gold nanoparticles. *Chemistry - A European Journal*, **2008**, 14, 11610-22	4.8	40
22	Oligomeric electrolyte as a multifunctional gelator. *Journal of the American Chemical Society*, **2007**, 129, 11039-41	16.4	105
21	Efficient Organic-Dye-Sensitized Nanocrystalline TiO2 Solar Cells **2006**,		1
20	Alkyl-functionalized organic dyes for efficient molecular photovoltaics. *Journal of the American Chemical Society*, **2006**, 128, 14256-7	16.4	793
19	Unidirectional molecular motor on a gold surface. *Nature*, **2005**, 437, 1337-40	50.4	455
18	Photocontrolled gel-to-sol-to-gel phase transitioning of meta-substituted azobenzene bisurethanes through the breaking and reforming of hydrogen bonds. *Langmuir*, **2004**, 20, 9897-900	4	103
17	A donor-acceptor substituted molecular motor: unidirectional rotation driven by visible light. *Organic and Biomolecular Chemistry*, **2003**, 1, 33-5	3.9	83
16	Light-driven molecular switches and motors. *Applied Physics A: Materials Science and Processing*, **2002**, 75, 301-308	2.6	78
15	Unidirectional rotary motion in a liquid crystalline environment: color tuning by a molecular motor. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 4945-9	11.5	167
14	In control of the speed of rotation in molecular motors. Unexpected retardation of rotary motion. *Chemical Communications*, **2002**, 2962-3	5.8	29
13	Second generation light-driven molecular motors. Unidirectional rotation controlled by a single stereogenic center with near-perfect photoequilibria and acceleration of the speed of rotation by structural modification. *Journal of the American Chemical Society*, **2002**, 124, 5037-51	16.4	268
12	Chemistry of Unique Chiral Olefins. A Light-Powered Chiral Molecular Motor with Monodirectional Rotation.. *Nippon Kagaku Kaishi / Chemical Society of Japan - Chemistry and Industrial Chemistry Journal*, **2000**, 2000, 591-603		
11	Chiral overcrowded alkenes; asymmetric synthesis of (3S,3R□S)-(M, M)-(E)-(+)-1,1R□2,2R□3,3R□4,4Roctahydro-3,3R□7,7Rtetramethyl-4, 4Rbiphenanthrylidenes. *Chirality*, **2000**, 12, 734-41	2.1	7
10	Light-Driven Molecular Rotor: Unidirectional Rotation Controlled by a Single Stereogenic Center. *Journal of the American Chemical Society*, **2000**, 122, 12005-12006	16.4	159
9	Chiroptical Molecular Switches. *Chemical Reviews*, **2000**, 100, 1789-1816	68.1	898

8	Light-driven monodirectional molecular rotor. *Nature*, **1999**, 401, 152-5	50.4	1386
7	Chemistry of Unique Chiral Olefins. 4. Theoretical Studies of the Racemization Mechanism of trans- and cis-1,1R,2,2R,3,3R,4,4ROctahydro-4,4Rbiphenanthrylidenes. *Journal of Organic Chemistry*, **1999**, 64, 1667-1674	4.2	31
6	Photochemistry and Absolute Stereochemistry of Unique Chiral Olefins, trans- and cis-1,1?,2,2?,3,3?,4,4?-Octahydro-3,3?-dimethyl-4,4?-biphenanthrylidenes. *Chemistry Letters*, **1998**, 27, 1151-1152	1.7	13
5	Chemistry of Unique Chiral Olefins. 1. Synthesis, Enantioresolution, Circular Dichroism, and Theoretical Determination of the Absolute Stereochemistry of trans- and cis-1,1□2,2□3,3□4,4□Octahydro-4,4□biphenanthrylidenes. *Journal of the American Chemical Society*, **1997**, 119, 7241-7248	16.4	43
4	Chemistry of Unique Chiral Olefins. 2. Unexpected Thermal Racemization of cis-1,1□2,2□3,3□4,4□Octahydro-4,4□biphenanthrylidene. *Journal of the American Chemical Society*, **1997**, 119, 7249-7255	16.4	38
3	Chemistry of Unique Chiral Olefins. 3. Synthesis and Absolute Stereochemistry of trans- and cis-1,1□2,2□3,3□4,4□Octahydro-3,3□dimethyl-4,4□biphenanthrylidenes. *Journal of the American Chemical Society*, **1997**, 119, 7256-7264	16.4	75
2	Synthetic Molecular Motors559-577		1
1	Two-Step Continuous-Flow Synthesis of Fungicide Metalaxyl through Catalytic C□N Bond-Formation Processes. *Advanced Synthesis and Catalysis*,	5.6	0