

# Roland Hany

## List of Publications by Year in descending order

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92  
papers

2,655  
citations

136950

32  
h-index

223800

46  
g-index

92  
all docs

92  
docs citations

92  
times ranked

3709  
citing authors

#	ARTICLE	IF	CITATIONS
1	Hydrogen reduction of molybdenum oxide at room temperature. <i>Scientific Reports</i> , 2017, 7, 40761.	3.3	147
2	Transparent Organic Photodetector using a Near-Infrared Absorbing Cyanine Dye. <i>Scientific Reports</i> , 2015, 5, 9439.	3.3	109
3	Dissociation of Charge Transfer States and Carrier Separation in Bilayer Organic Solar Cells: A Time-Resolved Electroabsorption Spectroscopy Study. <i>Journal of the American Chemical Society</i> , 2015, 137, 8192-8198.	13.7	86
4	Tailor-made olefinic medium-chain-length poly[(R)-3-hydroxyalkanoates] by <i>Pseudomonas putida</i> GPo1: Batch versus chemostat production. <i>Biotechnology and Bioengineering</i> , 2006, 93, 737-746.	3.3	82
5	Woven Electrodes for Flexible Organic Photovoltaic Cells. <i>Advanced Materials</i> , 2011, 23, 1015-1019.	21.0	78
6	Tailored Biosynthesis of Olefinic Medium-Chain-Length Poly[(R)-3-hydroxyalkanoates] in <i>Pseudomonas putida</i> GPo1 with Improved Thermal Properties. <i>Macromolecules</i> , 2004, 37, 6780-6785.	4.8	68
7	Aryltriazene Photopolymers for UV-Laser Applications: Improved Synthesis and Photodecomposition Study. <i>Macromolecular Chemistry and Physics</i> , 2007, 208, 277-286.	2.2	68
8	One-step flame synthesis of SnO <sub>2</sub> /TiO <sub>2</sub> composite nanoparticles for photocatalytic applications. <i>International Journal of Photoenergy</i> , 2005, 7, 153-161.	2.5	66
9	NIR-Absorbing Heptamethine Dyes with Tailor-Made Counterions for Application in Light to Energy Conversion. <i>Organic Letters</i> , 2014, 16, 1044-1047.	4.6	59
10	Origin of the Kink in Current-Density Versus Voltage Curves and Efficiency Enhancement of Polymer-C <sub>60</sub> Heterojunction Solar Cells. <i>IEEE Journal of Selected Topics in Quantum Electronics</i> , 2010, 16, 1690-1699.	2.9	57
11	Photochemical Transformations in Fullerene and Molybdenum Oxide Affect the Stability of Bilayer Organic Solar Cells. <i>Advanced Energy Materials</i> , 2015, 5, 1400734.	19.5	55
12	Quantitative analysis of bacterial medium-chain-length poly([R]-3-hydroxyalkanoates) by gas chromatography. <i>Journal of Chromatography A</i> , 2007, 1143, 199-206.	3.7	54
13	Why perovskite solar cells with high efficiency show small IV-curve hysteresis. <i>Solar Energy Materials and Solar Cells</i> , 2017, 169, 159-166.	6.2	54
14	Nanostructured Organic Layers via Polymer Demixing for Interface-Enhanced Photovoltaic Cells. <i>Chemistry of Materials</i> , 2006, 18, 5504-5509.	6.7	53
15	Poly(3-hexylthiophene)/C <sub>60</sub> heterojunction solar cells: Implication of morphology on performance and ambipolar charge collection. <i>Solar Energy Materials and Solar Cells</i> , 2008, 92, 464-473.	6.2	51
16	Squaraine Dye for a Visibly Transparent All-Organic Optical Upconversion Device with Sensitivity at 1000 nm. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 11063-11069.	8.0	47
17	Semitransparent organic photovoltaics using a near-infrared absorbing cyanine dye. <i>Solar Energy Materials and Solar Cells</i> , 2013, 118, 157-164.	6.2	45
18	Improved performance of cyanine solar cells with polyaniline anodes. <i>Journal of Materials Chemistry</i> , 2010, 20, 2952.	6.7	44

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19	A transparent, solvent-free laminated top electrode for perovskite solar cells. <i>Science and Technology of Advanced Materials</i> , 2016, 17, 260-266.	6.1	44
20	Determination of polyhydroxyalkanoates in activated sludge by ion chromatographic and enzymatic methods. <i>Journal of Microbiological Methods</i> , 1999, 35, 111-119.	1.6	41
21	High performing doped cyanine bilayer solar cell. <i>Organic Electronics</i> , 2010, 11, 583-588.	2.6	41
22	Sulfonic and Oxanilic Acid Metabolites of Acetanilide Herbicides: Separation of Diastereomers and Enantiomers by Capillary Zone Electrophoresis and Identification by <sup>1</sup> H NMR Spectroscopy. <i>Environmental Science &amp; Technology</i> , 1999, 33, 3462-3468.	10.0	39
23	Low Band Gap Polymeric Cyanine Dyes Absorbing in the NIR Region. <i>Macromolecular Rapid Communications</i> , 2008, 29, 651-658.	3.9	39
24	Enhanced cyanine solar cell performance upon oxygen doping. <i>Organic Electronics</i> , 2008, 9, 85-94.	2.6	39
25	Chemical synthesis and characterization of POSS-functionalized poly[3-hydroxyalkanoates]. <i>Polymer</i> , 2005, 46, 5025-5031.	3.8	38
26	On the use of cyanine dyes as low-bandgap materials in bulk heterojunction photovoltaic devices. <i>Synthetic Metals</i> , 2006, 156, 973-978.	3.9	37
27	Synthesis, thin-film morphology, and comparative study of bulk and bilayer heterojunction organic photovoltaic devices using soluble diketopyrrolopyrrole molecules. <i>Energy and Environmental Science</i> , 2011, 4, 3617.	30.8	37
28	Synthesis and Characterization of Novel Copoly(ester-urethane) Containing Blocks of Poly-[(R)-3-hydroxyoctanoate] and Poly-[(R)-3-hydroxybutyrate]. <i>Macromolecules</i> , 2002, 35, 4946-4950.	4.8	36
29	Chemical Synthesis of Crystalline Comb Polymers from Olefinic Medium-Chain-Length Poly[3-hydroxyalkanoates]. <i>Macromolecules</i> , 2004, 37, 385-389.	4.8	36
30	Strategies to improve cyanine dye multi layer organic solar cells. <i>Progress in Photovoltaics: Research and Applications</i> , 2011, 19, 851-857.	8.1	36
31	Toward Non-Toxic Antifouling: Synthesis of Hydroxy-, Cinnamic Acid-, Sulfate-, and Zosteric Acid-Labeled Poly[3-hydroxyalkanoates]. <i>Biomacromolecules</i> , 2004, 5, 1452-1456.	5.4	35
32	Biotransformation of Various Substituted Aromatic Compounds to Chiral Dihydrodihydroxy Derivatives. <i>Applied and Environmental Microbiology</i> , 2001, 67, 3333-3339.	3.1	33
33	Preparation and Characterization of Enantiomerically Pure Telechelic Diols from mcl-Poly[(R)-3-hydroxyalkanoates]. <i>Macromolecules</i> , 2002, 35, 684-689.	4.8	33
34	Optimized Electrolyte Loading and Active Film Thickness for Sandwich Polymer Light-Emitting Electrochemical Cells. <i>Advanced Optical Materials</i> , 2019, 7, 1801278.	7.3	32
35	Quantitative Determination of Resin Loading in Solid-Phase Organic Synthesis Using <sup>13</sup> C MAS NMR. <i>ACS Combinatorial Science</i> , 2001, 3, 85-89.	3.3	31
36	Nanoscale Structuring of Semiconducting Molecular Blend Films in the Presence of Mobile Counterions. <i>Langmuir</i> , 2008, 24, 7316-7322.	3.5	30

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37	Doping Evolution and Junction Formation in Stacked Cyanine Dye Light-Emitting Electrochemical Cells. ACS Applied Materials & Interfaces, 2016, 8, 6554-6562.	8.0	30
38	Diyne-Functionalized Fullerene Self-Assembly for Thin Film Solid-State Polymerization. Macromolecules, 2014, 47, 721-728.	4.8	28
39	Ionic Space Charge Driven Organic Photovoltaic Devices. Chimia, 2007, 61, 787-791.	0.6	27
40	Visible light-emitting host-guest electrochemical cells using cyanine dyes. Organic Electronics, 2017, 48, 77-84.	2.6	27
41	Absolute chemically induced nuclear polarizations from the photodissociation of phenylsubstituted ketones. Radical pair precursor states and memory effects. Chemical Physics, 1993, 172, 131-146.	1.9	24
42	Exploiting supramolecular assemblies for filterless ultra-narrowband organic photodetectors with inkjet fabrication capability. Journal of Materials Chemistry C, 2019, 7, 14639-14650.	5.5	24
43	Photoinduced hole-transfer in semiconducting polymer/low-bandgap cyanine dye blends: evidence for unit charge separation quantum yield. Physical Chemistry Chemical Physics, 2009, 11, 8886.	2.8	23
44	Time-Dependent Structure and Emission Zone in Sandwich-Type Light-Emitting Electrochemical Cells. ACS Photonics, 2018, 5, 1591-1598.	6.6	23
45	Interface morphology snapshots of vertically segregated thin films of semiconducting polymer/polystyrene blends. Polymer, 2007, 48, 2380-2386.	3.8	22
46	Influence of crystalline titanium oxide layer smoothness on the performance of inverted organic bilayer solar cells. Applied Physics Letters, 2013, 102, .	3.3	22
47	Recent advances with optical upconverters made from all-organic and hybrid materials. Science and Technology of Advanced Materials, 2019, 20, 497-510.	6.1	22
48	The Dynamic Emission Zone in Sandwich Polymer Light-Emitting Electrochemical Cells. Advanced Functional Materials, 2020, 30, 1906803.	14.9	22
49	Simultaneous Quantification of Acetanilide Herbicides and Their Oxanilic and Sulfonic Acid Metabolites in Natural Waters. Analytical Chemistry, 2000, 72, 840-845.	6.5	21
50	Stability of bilayer trimethine cyanine dye/fullerene organic solar cells. Solar Energy Materials and Solar Cells, 2013, 117, 585-591.	6.2	20
51	Growth and Alignment of Thin Film Organic Single Crystals from Dewetting Patterns. ACS Nano, 2013, 7, 5506-5513.	14.6	20
52	Encapsulated Zosteric Acid Embedded in Poly[3-hydroxyalkanoate] Coatings?Protection against Biofouling. Polymer Bulletin, 2004, 52, 65.	3.3	19
53	Influence of Molybdenum Oxide Interface Solvent Sensitivity on Charge Trapping in Bilayer Cyanine Solar Cells. Journal of Physical Chemistry C, 2014, 118, 17036-17045.	3.1	19
54	Ternary semitransparent organic solar cells with a laminated top electrode. Science and Technology of Advanced Materials, 2017, 18, 68-75.	6.1	19

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55	Strongly Red-Shifted Photoluminescence Band Induced by Molecular Twisting in Cyanine (Cy3) Dye Films. <i>Journal of Physical Chemistry C</i> , 2017, 121, 9587-9593.	3.1	19
56	Squaraine Planar-Heterojunction Solar Cells. <i>International Journal of Photoenergy</i> , 2009, 2009, 1-7.	2.5	18
57	Organic Salt Semiconductor with High Photoconductivity and Long Carrier Lifetime. <i>Advanced Functional Materials</i> , 2018, 28, 1705724.	14.9	17
58	Solution-Processed Organic Optical Upconversion Device. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 23428-23435.	8.0	17
59	Separation and analysis of CIDNP spin orders for a coupled multiproton system. <i>Chemical Physics</i> , 1988, 120, 169-175.	1.9	16
60	Oligothiophene dendron-decorated squaraine dyes: Synthesis, thin film formation, and performance in organic solar cells. <i>Organic Electronics</i> , 2012, 13, 1204-1212.	2.6	16
61	Resonance Light Scattering in Dye-Aggregates Forming in Dewetting Droplets. <i>ACS Nano</i> , 2014, 8, 10057-10065.	14.6	16
62	A simple HPLC-MS method for the quantitative determination of the composition of bacterial medium chain-length polyhydroxyalkanoates. <i>Journal of Separation Science</i> , 2008, 31, 1739-1744.	2.5	15
63	Cyanine tandem and triple-junction solar cells. <i>Organic Electronics</i> , 2016, 30, 191-199.	2.6	15
64	Shortwave infrared-absorbing squaraine dyes for all-organic optical upconversion devices. <i>Science and Technology of Advanced Materials</i> , 2021, 22, 194-204.	6.1	15
65	Characterization of New Bacterial Copolyesters Containing 3-Hydroxyoxoalkanoates and Acetoxy-3-hydroxyalkanoates. <i>Macromolecules</i> , 2000, 33, 8571-8575.	4.8	13
66	Transparent, flexible and low-resistive precision fabric electrode for organic solar cells. <i>Physica Status Solidi - Rapid Research Letters</i> , 2009, 3, 278-280.	2.4	13
67	Simultaneous Biosynthesis of Two Copolymers in <i>Pseudomonas putida</i> GPO1 Using a Two-Stage Continuous Culture System. <i>Biomacromolecules</i> , 2010, 11, 1488-1493.	5.4	13
68	Insights into photovoltaic properties of ternary organic solar cells from phase diagrams. <i>Science and Technology of Advanced Materials</i> , 2018, 19, 669-682.	6.1	13
69	Carrier Tunneling from Charge Transfer States in Organic Photovoltaic Cells. <i>Advanced Functional Materials</i> , 2021, 31, 2102000.	14.9	13
70	Fast Assembly of Cyanine Dyes into Aggregates onto [6,6]-Phenyl C <sub>61</sub> -Butyric Acid Methyl Ester Surfaces from Organic Solvents. <i>Langmuir</i> , 2010, 26, 3955-3961.	3.5	12
71	Solution Processing and Self-Organization of PbS Quantum Dots Passivated with Formamidinium Lead Iodide (FAPbI <sub>3</sub> ). <i>ACS Omega</i> , 2020, 5, 15746-15754.	3.5	12
72	Influence of chemically p-type doped active organic semiconductor on the film thickness versus performance trend in cyanine/C <sub>60</sub> bilayer solar cells. <i>Science and Technology of Advanced Materials</i> , 2015, 16, 035003.	6.1	10

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73	Direct Measurement of Ion Redistribution and Resulting Modification of Chemical Equilibria in Polymer Thin Film Light-Emitting Electrochemical Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 39100-39106.	8.0	10
74	Electron Trap Dynamics in Polymer Light-Emitting Diodes. <i>Advanced Functional Materials</i> , 2022, 32, .	14.9	9
75	Dynamics of Charge Distribution in Sandwich-Type Light-Emitting Electrochemical Cells Probed by the Stark Effect. <i>ACS Photonics</i> , 2018, 5, 3124-3131.	6.6	8
76	Near-infrared absorbing cyanine dyes for all-organic optical upconversion devices. <i>Organic Electronics</i> , 2019, 74, 96-102.	2.6	8
77	Quantitative Determination of Loadings and Oxidation Products of Polystyrene-Bound Phosphines Using <sup>31</sup> P MAS NMR. <i>ACS Combinatorial Science</i> , 2003, 5, 610-616.	3.3	7
78	Cyanine dye polyelectrolytes for organic bilayer solar cells. <i>Polymer</i> , 2014, 55, 3195-3201.	3.8	7
79	Asymmetric azide-alkyne Huisgen cycloaddition on chiral metal surfaces. <i>Communications Chemistry</i> , 2021, 4, .	4.5	7
80	On the Response Speed of Narrowband Organic Optical Upconversion Devices. <i>Advanced Optical Materials</i> , 2022, 10, .	7.3	7
81	Spatially resolved photocurrent mapping of efficient organic solar cells fabricated on a woven mesh electrode. <i>Progress in Photovoltaics: Research and Applications</i> , 2013, 21, 652-657.	8.1	6
82	Template synthesis of cyanine dye H-aggregates on nanostructured [6,6]-phenyl C61-butyric acid methyl ester substrates. <i>Physical Chemistry Chemical Physics</i> , 2011, 13, 15714.	2.8	5
83	Dewetting-driven hierarchical self-assembly of small semiconducting molecules. <i>Soft Matter</i> , 2012, 8, 5804.	2.7	5
84	Interfacial self-assembly of nanoporous C <sub>60</sub> thin films. <i>RSC Advances</i> , 2016, 6, 23141-23147.	3.6	5
85	Comment on Influence of the Chemical Environment on Metolachlor Conformations. <i>Journal of Agricultural and Food Chemistry</i> , 2000, 48, 4448-4449.	5.2	4
86	Improved reproducibility of chemical reactions on purified polystyrene resins monitored by <sup>31</sup> P MAS NMR. <i>Tetrahedron Letters</i> , 2003, 44, 6987-6990.	1.4	4
87	Global snapshot of the effects of the COVID-19 pandemic on the research activities of materials scientists between Spring and Autumn 2020. <i>Science and Technology of Advanced Materials</i> , 2021, 22, 173-184.	6.1	3
88	Unexpected Equilibrium Ionic Distribution in Cyanine/C <sub>60</sub> Heterojunctions. <i>Advanced Materials Interfaces</i> , 2017, 4, 1600891.	3.7	2
89	Focus issue on organic and hybrid photovoltaics. <i>Science and Technology of Advanced Materials</i> , 2019, 20, 42-43.	6.1	2
90	Cyanine dyes in solid state organic heterojunction solar cells. , 2014, , .		1

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91	Flexible Mesh Electrodes: Woven Electrodes for Flexible Organic Photovoltaic Cells (Adv. Mater.) Tj ETQq1 1 0.784314rgBT /Overlock	21.0	0
92	Performance and Stability of Organic Trimethine Cyanine Dyeâ€”C60 Heterojunction Solar Cells. , 2014, , 221-229.		0