

Rainer F Mahrt

List of Publications by Citations

Source: <https://exaly.com/author-pdf/7071890/rainer-f-mahrt-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

135
papers

7,722
citations

41
h-index

86
g-index

157
ext. papers

8,428
ext. citations

8.4
avg, IF

5.5
L-index

#	Paper	IF	Citations
135	Efficient two layer leds on a polymer blend basis. <i>Advanced Materials</i> , 1995 , 7, 551-554	24	1400
134	Bright triplet excitons in caesium lead halide perovskites. <i>Nature</i> , 2018 , 553, 189-193	50.4	517
133	Room-temperature Bose-Einstein condensation of cavity exciton-polaritons in a polymer. <i>Nature Materials</i> , 2014 , 13, 247-52	27	429
132	Femtosecond energy relaxation in pi -conjugated polymers. <i>Physical Review Letters</i> , 1993 , 70, 3820-3823	7.4	388
131	Aggregate fluorescence in conjugated polymers. <i>Chemical Physics Letters</i> , 1995 , 240, 373-378	2.5	364
130	Ultrafast field-induced dissociation of excitons in conjugated polymers. <i>Physical Review Letters</i> , 1994 , 73, 1440-1443	7.4	292
129	Superfluorescence from lead halide perovskite quantum dot superlattices. <i>Nature</i> , 2018 , 563, 671-675	50.4	240
128	Single Cesium Lead Halide Perovskite Nanocrystals at Low Temperature: Fast Single-Photon Emission, Reduced Blinking, and Exciton Fine Structure. <i>ACS Nano</i> , 2016 , 10, 2485-90	16.7	239
127	Conjugated polymers: lasing and stimulated emission. <i>Current Opinion in Solid State and Materials Science</i> , 2001 , 5, 143-154	12	185
126	Conformational effects in poly(p-phenylene vinylene)s revealed by low-temperature site-selective fluorescence. <i>Journal of Physics Condensed Matter</i> , 1993 , 5, 247-260	1.8	170
125	Probing the wave function delocalization in CdSe/CdS dot-in-rod nanocrystals by time- and temperature-resolved spectroscopy. <i>ACS Nano</i> , 2011 , 5, 4031-6	16.7	135
124	Quaterrylenebis(dicarboximide)s: near infrared absorbing and emitting dyes. <i>Journal of Materials Chemistry</i> , 1998 , 8, 2357-2369		118
123	Time resolved luminescence study of recombination processes in electroluminescent polymers. <i>Applied Physics Letters</i> , 1993 , 62, 2827-2829	3.4	101
122	Monte Carlo study of picosecond exciton relaxation and dissociation in poly(phenylenevinylene). <i>Physical Review B</i> , 1996 , 54, 5536-5544	3.3	95
121	A room-temperature organic polariton transistor. <i>Nature Photonics</i> , 2019 , 13, 378-383	33.9	92
120	SU-8 for real three-dimensional subdiffraction-limit two-photon microfabrication. <i>Applied Physics Letters</i> , 2004 , 84, 4095-4097	3.4	90
119	Dynamics of optical excitations in a ladder-type pi -conjugated polymer containing aggregate states. <i>Physical Review B</i> , 1996 , 54, 1759-1765	3.3	89

118	Dynamics of singlet excitations in conjugated polymers: Poly(phenylenevinylene) and poly(phenylphenylenevinylene). <i>Physical Review B</i> , 1994 , 50, 10769-10779	3.3	88
117	Progress towards processible materials for light-emitting devices using poly(p-phenylphenylenevinylene). <i>Advanced Materials</i> , 1992 , 4, 661-662	24	86
116	Microcavity effects in a spin-coated polymer two-layer system. <i>Applied Physics Letters</i> , 1995 , 66, 1301-1303	3.4	83
115	Field-induced exciton breaking in conjugated polymers. <i>Physical Review B</i> , 1995 , 52, 4932-4940	3.3	75
114	Energy transfer in hybrid organic/inorganic nanocomposites. <i>Nano Letters</i> , 2009 , 9, 453-6	11.5	72
113	Enhanced Dipole-Dipole Interaction in a Polymer Microcavity. <i>Physical Review Letters</i> , 1999 , 82, 4118-4121	7.4	71
112	A Surface-Emitting Circular Grating Polymer Laser. <i>Advanced Materials</i> , 2001 , 13, 1161-1164	24	69
111	Electroluminescence from polymer blends and molecularly doped polymers. <i>Synthetic Metals</i> , 1994 , 64, 141-145	3.6	69
110	Femtosecond dynamics of stimulated emission and photoinduced absorption in a PPP-type ladder polymer. <i>Chemical Physics Letters</i> , 1995 , 244, 171-176	2.5	68
109	Majority carrier injection from ITO anodes into organic light-emitting diodes based upon polymer blends. <i>Synthetic Metals</i> , 1995 , 68, 263-268	3.6	65
108	Nearly temperature-independent threshold for amplified spontaneous emission in colloidal CdSe/CdS quantum dot-in-rods. <i>Advanced Materials</i> , 2012 , 24, OP231-5	24	60
107	Picosecond hopping relaxation in conjugated polymers. <i>Chemical Physics Letters</i> , 1993 , 209, 243-246	2.5	57
106	Two-Photon Pumped Lasing from a Two-Dimensional Photonic Bandgap Structure with Polymeric Gain Material. <i>Advanced Materials</i> , 2002 , 14, 673-676	24	56
105	On-Chip Integrated Quantum-Dot-Silicon-Nitride Microdisk Lasers. <i>Advanced Materials</i> , 2017 , 29, 1604866-4	3.4	54
104	Band-edge exciton fine structure of small, nearly spherical colloidal CdSe/ZnS quantum dots. <i>ACS Nano</i> , 2011 , 5, 8033-9	16.7	52
103	Disorder influenced optical properties of Hexithiophene single crystals and thin evaporated films. <i>Chemical Physics</i> , 1998 , 227, 49-56	2.3	52
102	Electro-optical studies of a soluble conjugated polymer with particularly low intrachain disorder. <i>Physical Review B</i> , 1999 , 60, 8650-8658	3.3	52
101	Site-selective fluorescence studies on polysilylenes. <i>Chemical Physics</i> , 1991 , 150, 81-91	2.3	52

100	Perovskite-type superlattices from lead halide perovskite nanocubes. <i>Nature</i> , 2021 , 593, 535-542	50.4	49
99	Band structure engineering via piezoelectric fields in strained anisotropic CdSe/CdS nanocrystals. <i>Nature Communications</i> , 2015 , 6, 7905	17.4	48
98	Exciton versus band description of the absorption, luminescence and electro-absorption of poly(phenylphenylenevinylene) and poly(dodecylthiophene). <i>Synthetic Metals</i> , 1992 , 49, 341-352	3.6	47
97	Controlling the exciton fine structure splitting in CdSe/CdS dot-in-rod nanojunctions. <i>ACS Nano</i> , 2012 , 6, 1979-87	16.7	46
96	Electroluminescence from phenylenevinylene-based polymer blends. <i>Advanced Materials for Optics and Electronics</i> , 1993 , 2, 197-204		42
95	Picosecond time resolved photoluminescence spectroscopy of a tetracene film on highly oriented pyrolytic graphite: dynamical relaxation, trap emission, and superradiance. <i>Journal of Chemical Physics</i> , 2007 , 127, 114705	3.9	41
94	Observation of strong exciton-photon coupling in an organic microcavity. <i>Chemical Physics Letters</i> , 2001 , 344, 352-356	2.5	41
93	The optical gain mechanism in solid conjugated polymers. <i>Applied Physics Letters</i> , 1998 , 72, 2933-2935	3.4	40
92	Energy transfer in molecularly doped conjugated polymers. <i>Synthetic Metals</i> , 1996 , 78, 289-293	3.6	39
91	Laser emission from a solid conjugated polymer: Gain, tunability, and coherence. <i>Physical Review B</i> , 1998 , 57, R4218-R4221	3.3	37
90	Electric field-induced fluorescence quenching and transient fluorescence studies in poly(p-terphenylene vinylene) related polymers. <i>Chemical Physics</i> , 1998 , 227, 167-178	2.3	36
89	A blue light emitting polymer with phenylenevinylene segments in the side-chains. <i>Advanced Materials</i> , 1995 , 7, 388-390	24	35
88	Evidence for bandedge lasing in a two-dimensional photonic bandgap polymer laser. <i>Applied Physics Letters</i> , 2002 , 80, 734-736	3.4	34
87	Light and heavy excitonic polarons in conjugated polymers. <i>Synthetic Metals</i> , 1991 , 45, 107-117	3.6	34
86	Long Exciton Dephasing Time and Coherent Phonon Coupling in CsPbBrCl Perovskite Nanocrystals. <i>Nano Letters</i> , 2018 , 18, 7546-7551	11.5	34
85	Lasing Supraparticles Self-Assembled from Nanocrystals. <i>ACS Nano</i> , 2018 , 12, 12788-12794	16.7	33
84	The Origin of Photoluminescence from Hexithienyl Thin Films. <i>Journal of Physical Chemistry B</i> , 1998 , 102, 7563-7567	3.4	29
83	Plasmonic nanohybrid with ultrasmall Ag nanoparticles and fluorescent dyes. <i>ACS Nano</i> , 2011 , 5, 3536-416.7	16.7	28

82	Excitation dynamics in conjugated polymers. <i>Pure and Applied Chemistry</i> , 1995 , 67, 377-385	2.1	28
81	Vertical microcavities with high Q and strong lateral mode confinement. <i>Physical Review B</i> , 2013 , 87,	3.3	27
80	Lasing in organic circular grating structures. <i>Journal of Applied Physics</i> , 2004 , 96, 3043-3049	2.5	27
79	Polarization-sensitive photoconductivity in aligned polyfluorene layers. <i>Applied Physics Letters</i> , 2002 , 80, 4699-4701	3.4	27
78	Spontaneous and stimulated emission from a ladder-type conjugated polymer. <i>Physical Review B</i> , 1999 , 59, 4112-4118	3.3	27
77	The dynamics of gain-narrowing in a ladder-type conjugated polymer. <i>Chemical Physics Letters</i> , 1999 , 312, 376-384	2.5	27
76	Resonant energy transfer within a colloidal nanocrystal polymer host system. <i>Applied Physics Letters</i> , 2007 , 90, 071108	3.4	26
75	Dynamics of excitation transfer in dye doped conjugated polymers. <i>Chemical Physics Letters</i> , 1995 , 245, 534-538	2.5	26
74	Integrated all-optical switch in a cross-waveguide geometry. <i>Applied Physics Letters</i> , 2006 , 88, 171104	3.4	25
73	Time-resolved studies of two-photon absorption processes in poly(p-phenylenevinylene)s. <i>Chemical Physics Letters</i> , 1993 , 203, 28-32	2.5	25
72	Ultrafast all-optical modulator with femtojoule absorbed switching energy in silicon-on-insulator. <i>Optics Express</i> , 2010 , 18, 22485-96	3.3	24
71	Exciton dynamics within the band-edge manifold states: the onset of an acoustic phonon bottleneck. <i>Nano Letters</i> , 2012 , 12, 5224-9	11.5	23
70	Room-Temperature Exciton-Polariton Condensation in a Tunable Zero-Dimensional Microcavity. <i>ACS Photonics</i> , 2018 , 5, 85-89	6.3	22
69	Dependence of Rabi-splitting on the spatial position of the optically active layer in organic microcavities in the strong coupling regime. <i>Chemical Physics</i> , 2002 , 285, 113-120	2.3	22
68	Monodisperse Long-Chain Sulfobetaine-Capped CsPbBr Nanocrystals and Their Superfluorescent Assemblies. <i>ACS Central Science</i> , 2021 , 7, 135-144	16.8	22
67	Dye molecules encapsulated in a micelle structure: nano-aggregates with enhanced optical properties. <i>Advanced Materials</i> , 2010 , 22, 3681-4	24	21
66	Nonequilibrium polariton dynamics in organic microcavities. <i>Physical Review B</i> , 2002 , 66,	3.3	21
65	Relaxation dynamics of excitons in thin quaterthiophene films on different substrates. <i>Chemical Physics Letters</i> , 1999 , 314, 9-15	2.5	21

64	Two-photon fluorescence and femtosecond two-photon absorption studies of MeLPPP, a ladder-type poly(phenylene) with low intra-chain disorder. <i>Chemical Physics Letters</i> , 1999 , 313, 755-762	2.5	21
63	Zero-Dimensional Organic Exciton Polaritons in Tunable Coupled Gaussian Defect Microcavities at Room Temperature. <i>ACS Photonics</i> , 2016 , 3, 1542-1545	6.3	21
62	Organic mixed-order photonic crystal lasers with ultrasmall footprint. <i>Applied Physics Letters</i> , 2007 , 91, 171108	3.4	20
61	Ultracompact silicon/polymer laser with an absorption-insensitive nanophotonic resonator. <i>Nano Letters</i> , 2010 , 10, 3675-8	11.5	18
60	Control of the Emission Properties of Conjugated Polymers: Trapping and Microcavity Effects. <i>Molecular Crystals and Liquid Crystals</i> , 1994 , 256, 335-342		18
59	Enhanced feedback in organic photonic-crystal lasers. <i>Applied Physics Letters</i> , 2005 , 87, 151121	3.4	17
58	Spectroscopy of Conjugated Polymers. <i>Zeitschrift Fur Physikalische Chemie</i> , 1994 , 184, 233-252	3.1	17
57	Single-photon nonlinearity at room temperature. <i>Nature</i> , 2021 , 597, 493-497	50.4	17
56	Polarized photoluminescence and spectral narrowing in an oriented polyfluorene thin film. <i>ChemPhysChem</i> , 2000 , 1, 142-6	3.2	15
55	Design and optical characterization of photonic crystal lasers with organic gain material. <i>Journal of Optics (United Kingdom)</i> , 2010 , 12, 065003	1.7	14
54	Control of the interaction strength of photonic molecules by nanometer precise 3D fabrication. <i>Scientific Reports</i> , 2017 , 7, 16502	4.9	13
53	Blue-green laser emission from a solid conjugated polymer. <i>Solid State Communications</i> , 1997 , 104, 759-762		13
52	Hampered excimer formation in a perylene derivative with bulky functional groups. <i>Chemical Physics Letters</i> , 2001 , 341, 213-218	2.5	13
51	Observation of interface excitons and energy transfer processes in an oligo-thiophene multi-layer structure. <i>Chemical Physics Letters</i> , 1995 , 242, 207-211	2.5	13
50	Impact of the Band-Edge Fine Structure on the Energy Transfer between Colloidal Quantum Dots. <i>Advanced Optical Materials</i> , 2014 , 2, 126-130	8.1	11
49	Integrated vertical microcavity using a nano-scale deformation for strong lateral confinement. <i>Applied Physics Letters</i> , 2013 , 103, 243305	3.4	11
48	Control of Fano line shapes by means of photonic crystal structures in a dye-doped polymer. <i>Applied Physics Letters</i> , 2007 , 90, 201105	3.4	11
47	Exciton Dynamics and Effects of Structural Order in Morphology-Controlled J-Aggregate Assemblies. <i>Advanced Functional Materials</i> , 2019 , 29, 1806997	15.6	11

46	Analytical calculation of the Q factor for circular-grating microcavities. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2007 , 24, 906	1.7	10
45	Observation of strong exciton-photon coupling in an organic microcavity in transmission and photoluminescence. <i>Journal of Luminescence</i> , 2001 , 94-95, 821-826	3.8	10
44	Enhancement of the mode coupling in photonic-crystal-based organic lasers. <i>Journal of Optics</i> , 2005 , 7, S230-S234		9
43	Conjugated polymer lasers: emission characteristics and gain mechanism. <i>Physical Chemistry Chemical Physics</i> , 1999 , 1, 1795-1800	3.6	9
42	Unraveling the Origin of the Long Fluorescence Decay Component of Cesium Lead Halide Perovskite Nanocrystals. <i>ACS Nano</i> , 2020 , 14, 14939-14946	16.7	8
41	Enhanced Room-Temperature Photoluminescence Quantum Yield in Morphology Controlled J-Aggregates. <i>Advanced Science</i> , 2021 , 8, 1903080	13.6	8
40	Circular grating resonators as small mode-volume microcavities for switching. <i>Optics Express</i> , 2009 , 17, 5953-64	3.3	7
39	Fabrication and characterization of Ta2O5 photonic feedback structures. <i>Microelectronic Engineering</i> , 2008 , 85, 1425-1428	2.5	7
38	Optical and electroemission properties of thin films of supermolecular anthracene-based rotaxanes. <i>Applied Surface Science</i> , 2001 , 175-176, 369-373	6.7	7
37	Spectroscopic assessment of the role of disorder and polaron formation on electronic transport in molecularly doped polymers. <i>Chemical Physics Letters</i> , 1992 , 192, 576-580	2.5	7
36	Tunable exciton-polariton condensation in a two-dimensional Lieb lattice at room temperature. <i>Communications Physics</i> , 2021 , 4,	5.4	7
35	Low-loss optical waveguides made with a high-loss material. <i>Light: Science and Applications</i> , 2021 , 10, 15	16.7	7
34	Ultra-high quality-factor resonators with perfect azimuthal modal-symmetry. <i>Optics Express</i> , 2009 , 17, 20998-1006	3.3	6
33	Excitation dynamics in hexithiophene single crystals and UHV-grown films. <i>Journal of Luminescence</i> , 1998 , 76-77, 416-419	3.8	6
32	Microresonator effects in optically and electrically pumped thin-film light-emitting diodes. <i>Synthetic Metals</i> , 1996 , 83, 257-260	3.6	6
31	Shape-Directed Co-Assembly of Lead Halide Perovskite Nanocubes with Dielectric Nanodisks into Binary Nanocrystal Superlattices. <i>ACS Nano</i> , 2021 , 15, 16488-16500	16.7	6
30	A Tunable Blue-Green Laser from a Solid Conjugated Polymer. <i>Physica Status Solidi (B): Basic Research</i> , 1998 , 206, 437-441	1.3	5
29	Ultrafast Fluorescence Spectroscopy of PPV. <i>Molecular Crystals and Liquid Crystals</i> , 1994 , 256, 9-16		5

28	CONTROL OF THE ENERGY TRANSFER WITH THE OPTICAL MICROCAVITY. <i>International Journal of Modern Physics B</i> , 2001 , 15, 3704-3708	1.1	4
27	Femtosecond Differential Transmission Spectroscopy of Hexithienyl Thin Film at Low Temperature. <i>Journal of Physical Chemistry B</i> , 2000 , 104, 6536-6540	3.4	4
26	Photophysical properties of thin films and solid phase of switchable supermolecular anthracene-based rotaxanes. <i>Synthetic Metals</i> , 2001 , 122, 63-65	3.6	4
25	Field-induced dissociation of optical excitations in conjugated polymers. <i>Journal of Non-Crystalline Solids</i> , 1996 , 198-200, 661-664	3.9	4
24	Site-selection spectroscopy of poly(di-n-butylgermylene) (PDBG). <i>Chemical Physics Letters</i> , 1991 , 177, 389-393	2.5	4
23	Structural Diversity in Multicomponent Nanocrystal Superlattices Comprising Lead Halide Perovskite Nanocubes.. <i>ACS Nano</i> , 2022 ,	16.7	4
22	Enhanced feedback and experimental band mapping of organic photonic-crystal lasers. <i>Journal of Optics</i> , 2006 , 8, S273-S277		3
21	Charge-induced dephasing in thin polythiophene films. <i>Physical Review B</i> , 2001 , 64,	3.3	3
20	Femtosecond differential transmission spectroscopy of Hexithienyl thin film. <i>Journal of Luminescence</i> , 2000 , 87-89, 736-738	3.8	3
19	Femtosecond Differential Transmission Spectroscopy of Hexithienyl Single Crystals at Low Temperature. <i>Journal of Physical Chemistry B</i> , 2000 , 104, 12210-12214	3.4	3
18	Time resolved luminescence spectroscopy of conjugated polymers. <i>Journal of Luminescence</i> , 1994 , 60-61, 479-481	3.8	3
17	Exciton-polariton Bose-Einstein condensation with a polymer at room temperature 2015 ,		2
16	A pump-and-probe method for the characterization of nonlinear material parameters within Fabry-Pérot microcavities. <i>Journal of Applied Physics</i> , 2006 , 100, 043112	2.5	2
15	Lasing in interferometrically structured organic materials. <i>Applied Physics Letters</i> , 2005 , 87, 241124	3.4	2
14	All-Optical Exciton-Polariton Transistor at Room Temperature 2019 ,		2
13	Integrated Silicon Nitride Microdisk Lasers Based on Quantum Dots 2016 ,		2
12	Polarization-Independent Photodetectors With Enhanced Responsivity in a Standard Silicon-on-Insulator Complementary MetalOxideSemiconductor Process. <i>Journal of Lightwave Technology</i> , 2009 , 27, 4892-4896	4	1
11	In-Plane Coupling into Circular-Grating Resonators for All-Optical Switching 2006 ,		1

10	Organic heteromultilayers: electronic structure of sexithienyl/ thin films grown in ultra-high vacuum. <i>Journal of Optics</i> , 1998 , 7, 151-157		1
9	Femtosecond Transient Absorption Spectroscopy in Hexithienyl thin films. <i>Synthetic Metals</i> , 1999 , 101, 555-556	3.6	1
8	Optical characterization of tris-(stilbene)amine and application in microcavities. <i>Synthetic Metals</i> , 1996 , 76, 117-119	3.6	1
7	Vibronic hole burning in acene-doped MTHF glasses. <i>Chemical Physics Letters</i> , 1990 , 165, 125-130	2.5	1
6	Quantum fluids in solid materials. <i>Materials Today</i> , 2014 , 17, 258-259		21.8
5	Photonic engineering of nonlinear-optical properties of hybrid materials for efficient ultrafast optical switching (PHOENIX) 2004 , 5464, 39		
4	Solid-state optical properties of the methyl-exopyridineanthracene rotaxane. <i>Chemical Physics</i> , 2001 , 269, 381-388		2.3
3	Observation of Phonon Resonances in the Optical Nonlinearity in an Hexithienyl Thin Film. <i>Physica Status Solidi (B): Basic Research</i> , 2000 , 221, 561-565		1.3
2	Time-resolved stimulated emission in an Hexithienyl thin film. <i>Synthetic Metals</i> , 2001 , 116, 49-51	3.6	
1	The effect of intermolecular interaction on the electronic properties of quaterylene. <i>Synthetic Metals</i> , 1999 , 102, 1589-1590	3.6	