Jakob Heier

List of Publications by Year in descending order

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67 papers	2,708 citations	201575 27 h-index	182361 51 g-index
69 all docs	69 docs citations	69 times ranked	3926 citing authors

#	Article	IF	Citations
1	A Universal Approach for Roomâ€Temperature Printing and Coating of 2D Materials. Advanced Materials, 2022, 34, e2103660.	11.1	15
2	Enhanced Roomâ€Temperature Photoluminescence Quantum Yield in Morphology Controlled Jâ€Aggregates. Advanced Science, 2021, 8, 1903080.	5.6	16
3	Coating Porous MXene Films with Tunable Porosity for Highâ€Performance Solidâ€State Supercapacitors. ChemElectroChem, 2021, 8, 1911-1917.	1.7	21
4	Twoâ€Dimensional Transition Metal Carbides and Nitrides (MXenes): Synthesis, Properties, and Electrochemical Energy Storage Applications. Energy and Environmental Materials, 2020, 3, 29-55.	7.3	319
5	Printing and coating MXenes for electrochemical energy storage devices. JPhys Energy, 2020, 2, 031004.	2.3	42
6	Turning Trash into Treasure: Additive Free MXene Sediment Inks for Screenâ€Printed Microâ€Supercapacitors. Advanced Materials, 2020, 32, e2000716.	11.1	241
7	Towards industrialization of perovskite solar cells using slot die coating. Journal of Materials Chemistry C, 2020, 8, 6124-6135.	2.7	44
8	Nanocelluloseâ€MXene Biomimetic Aerogels with Orientationâ€Tunable Electromagnetic Interference Shielding Performance. Advanced Science, 2020, 7, 2000979.	5.6	303
9	Twoâ€dimensional MXenes for lithiumâ€sulfur batteries. InformaÄnÃ-MateriÃ¡ly, 2020, 2, 613-638.	8.5	221
10	Inkjet printed mesoscopic perovskite solar cells with custom design capability. Materials Advances, 2020, 1, 153-160.	2.6	40
11	Physical vapour deposition of cyanine salts and their first application in organic electronic devices. Journal of Materials Chemistry C, 2019, 7, 414-423.	2.7	4
12	Gravure printed Ag/conductive polymer electrodes and simulation of their electrical properties. International Journal of Advanced Manufacturing Technology, 2019, 103, 3901-3912.	1.5	4
13	Excitonic channels from bio-inspired templated supramolecular assembly of J-aggregate nanowires. Nanoscale, 2019, 11, 6929-6938.	2.8	6
14	Exploiting supramolecular assemblies for filterless ultra-narrowband organic photodetectors with inkjet fabrication capability. Journal of Materials Chemistry C, 2019, 7, 14639-14650.	2.7	24
15	Exciton Dynamics and Effects of Structural Order in Morphologyâ€Controlled Jâ€Aggregate Assemblies. Advanced Functional Materials, 2019, 29, 1806997.	7.8	15
16	Increasing Photovoltaic Performance of an Organic Cationic Chromophore by Anion Exchange. Advanced Science, 2018, 5, 1700496.	5.6	13
17	Cyanine platelet single crystals: growth, crystal structure and optical spectra. Physical Chemistry Chemical Physics, 2018, 20, 29166-29173.	1.3	5
18	Combining parallel pattern generation of electrohydrodynamic lithography with serial addressing. RSC Advances, 2018, 8, 30932-30936.	1.7	4

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19	Superweak Coordinating Anion as Superstrong Enhancer of Cyanine Organic Semiconductor Properties. ChemPhysChem, 2018, 19, 3356-3363.	1.0	7
20	Insights into photovoltaic properties of ternary organic solar cells from phase diagrams. Science and Technology of Advanced Materials, 2018, 19, 669-682.	2.8	13
21	Ternary semitransparent organic solar cells with a laminated top electrode. Science and Technology of Advanced Materials, 2017, 18, 68-75.	2.8	19
22	Light Scattering Enhancement at the Absorption Edge in Dewetting Droplets of Cyanine Dyes. Advanced Optical Materials, 2017, 5, 1600903.	3.6	0
23	Strongly Red-Shifted Photoluminescence Band Induced by Molecular Twisting in Cyanine (Cy3) Dye Films. Journal of Physical Chemistry C, 2017, 121, 9587-9593.	1.5	19
24	Visible light-emitting host-guest electrochemical cells using cyanine dyes. Organic Electronics, 2017, 48, 77-84.	1.4	27
25	Unexpected Equilibrium Ionic Distribution in Cyanine/C₆₀ Heterojunctions. Advanced Materials Interfaces, 2017, 4, 1600891.	1.9	2
26	Ultrafast charge transfer in solid-state films of pristine cyanine borate and blends with fullerene. Journal of Materials Chemistry A, 2015, 3, 10935-10941.	5.2	10
27	Influence of chemically p-type doped active organic semiconductor on the film thickness versus performance trend in cyanine/C₆₀bilayer solar cells. Science and Technology of Advanced Materials, 2015, 16, 035003.	2.8	10
28	Photochemical Transformations in Fullerene and Molybdenum Oxide Affect the Stability of Bilayer Organic Solar Cells. Advanced Energy Materials, 2015, 5, 1400734.	10.2	55
29	Resonance Light Scattering in Dye-Aggregates Forming in Dewetting Droplets. ACS Nano, 2014, 8, 10057-10065.	7.3	16
30	Cyanine dyes in solid state organic heterojunction solar cells. , 2014, , .		1
31	Hematite nanostructuring using electrohydrodynamic lithography. Applied Surface Science, 2014, 305, 62-66.	3.1	8
32	NIR-Absorbing Heptamethine Dyes with Tailor-Made Counterions for Application in Light to Energy Conversion. Organic Letters, 2014, 16, 1044-1047.	2.4	59
33	The SFM/ToF-SIMS combination for advanced chemically-resolved analysis at the nanoscale. Nuclear Instruments & Methods in Physics Research B, 2014, 339, 85-90.	0.6	12
34	Diyne-Functionalized Fullerene Self-Assembly for Thin Film Solid-State Polymerization. Macromolecules, 2014, 47, 721-728.	2.2	28
35	Towards cancer cell-specific phototoxic organometallic rhenium(<scp>i</scp>) complexes. Dalton Transactions, 2014, 43, 4287-4294.	1.6	147
36	Photonic light trapping in self-organized all-oxide microspheroids impacts photoelectrochemical water splitting. Energy and Environmental Science, 2014, 7, 2680-2688.	15.6	47

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37	Spatially resolved photocurrent mapping of efficient organic solar cells fabricated on a woven mesh electrode. Progress in Photovoltaics: Research and Applications, 2013, 21, 652-657.	4.4	6
38	Growth and Alignment of Thin Film Organic Single Crystals from Dewetting Patterns. ACS Nano, 2013, 7, 5506-5513.	7.3	20
39	Dewetting-driven hierarchical self-assembly of small semiconducting molecules. Soft Matter, 2012, 8, 5804.	1.2	5
40	(Benzimidazolinâ€2â€ylidene)â€“Au^Iâ€“Alkynyl Complexes: Syntheses, Structure, and Photophysical Properties. European Journal of Inorganic Chemistry, 2012, 2012, 1750-1763.	1.0	19
41	Amyloid Directed Synthesis of Titanium Dioxide Nanowires and Their Applications in Hybrid Photovoltaic Devices. Advanced Functional Materials, 2012, 22, 3424-3428.	7.8	72
42	Self-organised microdots formed by dewetting in a highly volatile liquid. Journal of Colloid and Interface Science, 2012, 378, 201-209.	5.0	3
43	Oligothiophene dendron-decorated squaraine dyes: Synthesis, thin film formation, and performance in organic solar cells. Organic Electronics, 2012, 13, 1204-1212.	1.4	16
44	Synthesis, thin-film morphology, and comparative study of bulk and bilayer heterojunction organic photovoltaic devices using soluble diketopyrrolopyrrole molecules. Energy and Environmental Science, 2011, 4, 3617.	15.6	37
45	Template synthesis of cyanine dye H-aggregates on nanostructured [6,6]-phenyl C61-butyric acid methyl ester substrates. Physical Chemistry Chemical Physics, 2011, 13, 15714.	1.3	5
46	Strategies to improve cyanine dye multi layer organic solar cells. Progress in Photovoltaics: Research and Applications, 2011, 19, 851-857.	4.4	36
47	Three dimensional analysis of self-structuring organic thin films using time-of-flight secondary ion mass spectrometry. Thin Solid Films, 2011, 519, 6183-6189.	0.8	6
48	The effect of solvent and electric field on the size distribution of iron oxide microdots: Exploitation of self-assembly strategies for photoelectrodes. Journal of Materials Research, 2011, 26, 254-261.	1.2	2
49	Origin of the Kink in Current-Density Versus Voltage Curves and Efficiency Enhancement of Polymer-C $_{f 60}$ Heterojunction Solar Cells. IEEE Journal of Selected Topics in Quantum Electronics, 2010, 16, 1690-1699.	1.9	57
50	High performing doped cyanine bilayer solar cell. Organic Electronics, 2010, 11, 583-588.	1.4	41
51	Fast Assembly of Cyanine Dyes into Aggregates onto [6,6]-Phenyl C₆₁-Butyric Acid Methyl Ester Surfaces from Organic Solvents. Langmuir, 2010, 26, 3955-3961.	1.6	12
52	Improved performance of cyanine solar cells with polyaniline anodes. Journal of Materials Chemistry, 2010, 20, 2952.	6.7	44
53	J-aggregation of cyanine dyes by self-assembly. Colloids and Surfaces B: Biointerfaces, 2009, 74, 484-491.	2.5	39
54	Pattern formation in thin polymer films by spatially modulated electric fields. Soft Matter, 2009, 5, 3997.	1.2	34

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55	Poly(3-hexylthiophene)/C60 heterojunction solar cells: Implication of morphology on performance and ambipolar charge collection. Solar Energy Materials and Solar Cells, 2008, 92, 464-473.	3.0	51
56	Nanoscale Structuring of Semiconducting Molecular Blend Films in the Presence of Mobile Counterions. Langmuir, 2008, 24, 7316-7322.	1.6	30
57	Enlarged bilayer interfaces from liquid-liquid dewetting for photovoltaic applications. , 2008, , .		1
58	Ionic Space Charge Driven Organic Photovoltaic Devices. Chimia, 2007, 61, 787-791.	0.3	27
59	Interface control in organic heterojunction photovoltaic cells by phase separation processes. Proceedings of SPIE, 2007, , .	0.8	0
60	Interface morphology snapshots of vertically segregated thin films of semiconducting polymer/polystyrene blends. Polymer, 2007, 48, 2380-2386.	1.8	22
61	Kinetics of Individual Block Copolymer Island Formation and Disappearance near an Absorbing Boundary. Macromolecules, 2000, 33, 6060-6067.	2.2	31
62	Transfer of a chemical substrate pattern into an island-forming diblock copolymer film. Journal of Chemical Physics, 1999, 111, 11101-11110.	1.2	61
63	Spinodal Decomposition in a Subsurface Layer of a Polymer Blend Film. Macromolecules, 1999, 32, 3758-3765.	2.2	29
64	Anisotropic Coarsening of Two-Dimensional Surface Domains in Copolymer Thin Films. Macromolecules, 1999, 32, 9007-9012.	2.2	27
65	Wetting reversal transition in phaseâ€separated polymer mixtures. Macromolecular Symposia, 1999, 139, 77-85.	0.4	1
66	Thin Diblock Copolymer Films on Chemically Heterogeneous Surfacesâ€. Macromolecules, 1997, 30, 6610-6614.	2.2	116
67	Transient Surface Roughening of Thin Films of Phase Separating Polymer Mixtures. Langmuir, 1996, 12, 3716-3720.	1.6	41