

Lothar Weinhardt

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/8789701/lothar-weinhardt-publications-by-year.pdf>

Version: 2024-04-28

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.

153
papers

4,191
citations

36
h-index

58
g-index

167
ext. papers

4,630
ext. citations

5.3
avg, IF

4.78
L-index

#	Paper	IF	Citations
153	Coupling Methylammonium and Formamidinium Cations with Halide Anions: Hybrid Orbitals, Hydrogen Bonding, and the Role of Dynamics. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 25917-25926	3.8	0
152	Using the inelastic background in hard x-ray photoelectron spectroscopy for a depth-resolved analysis of the CdS/Cu(In,Ga)Se ₂ interface. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 2021 , 39, 063216	2.9	0
151	Impact of -Butylammonium Bromide on the Chemical and Electronic Structure of Double-Cation Perovskite Thin Films. <i>ACS Applied Materials & Interfaces</i> , 2021 ,	9.5	3
150	Impact of substrate temperature during NaF and KF post-deposition treatments on chemical and optoelectronic properties of alkali-free Cu(In,Ga)Se ₂ thin film solar cell absorbers. <i>Thin Solid Films</i> , 2021 , 739, 138979	2.2	1
149	Dynamic Effects and Hydrogen Bonding in Mixed-Halide Perovskite Solar Cell Absorbers. <i>Journal of Physical Chemistry Letters</i> , 2021 , 12, 3885-3890	6.4	4
148	Chemical Structure of a Carbon-Rich Layer at the Wet-Chemical Processed Cu ₂ ZnSn(S,Se) ₄ /Mo Interface. <i>IEEE Journal of Photovoltaics</i> , 2021 , 11, 658-663	3.7	1
147	Sulfate Speciation Analysis Using Soft X-ray Emission Spectroscopy. <i>Analytical Chemistry</i> , 2021 , 93, 8300-8308	1	
146	Steep sulfur gradient in CZTSSe solar cells by HS-assisted rapid surface sulfurization.. <i>RSC Advances</i> , 2021 , 11, 12687-12695	3.7	2
145	X-SPEC: a 70 eV to 15 keV undulator beamline for X-ray and electron spectroscopies. <i>Journal of Synchrotron Radiation</i> , 2021 , 28, 609-617	2.4	3
144	InO:H-Based Hole-Transport-Layer-Free Tin/Lead Perovskite Solar Cells for Efficient Four-Terminal All-Perovskite Tandem Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 46488-46498	9.5	6
143	Tandem Solar Cells: Vacuum-Assisted Growth of Low-Bandgap Thin Films (FA _{0.8} MA _{0.2} Sn _{0.5} Pb _{0.5} I ₃) for All-Perovskite Tandem Solar Cells (Adv. Energy Mater. 5/2020). <i>Advanced Energy Materials</i> , 2020 , 10, 2070021	21.8	1
142	Hybrid chemical bath deposition-CdS/sputter-Zn(O,S) alternative buffer for Cu ₂ ZnSn(S,Se) ₄ based solar cells. <i>Journal of Applied Physics</i> , 2020 , 127, 165301	2.5	1
141	Sulfurization as a promising surface passivation approach for both n- and p-type Si 2020 ,		1
140	Vacuum-Assisted Growth of Low-Bandgap Thin Films (FA _{0.8} MA _{0.2} Sn _{0.5} Pb _{0.5} I ₃) for All-Perovskite Tandem Solar Cells. <i>Advanced Energy Materials</i> , 2020 , 10, 1902583	21.8	36
139	Observation of Double Excitations in the Resonant Inelastic X-ray Scattering of Nitric Oxide. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 7476-7482	6.4	6
138	Electron Transfer Dynamics and Structural Effects in Benzonitrile Monolayers with Tuned Dipole Moments by Differently Positioned Fluorine Atoms. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 39859-39869	9.5	5
137	Impact of UV-induced ozone and low-energy Ar ⁺ -ion cleaning on the chemical structure of Cu(In,Ga)(S,Se) ₂ absorber surfaces. <i>Journal of Applied Physics</i> , 2020 , 128, 155301	2.5	1

136	Modifications of the CZTSe/Mo back-contact interface by plasma treatments.. <i>RSC Advances</i> , 2019 , 9, 26850-26855	3.7	8
135	Molybdenum Disulfide Catalytic Coatings via Atomic Layer Deposition for Solar Hydrogen Production from Copper Gallium Diselenide Photocathodes. <i>ACS Applied Energy Materials</i> , 2019 , 2, 1060-1066	6.1	15
134	Intermixing at the InxSy/Cu2ZnSn(S,Se)4 Heterojunction and Its Impact on the Chemical and Electronic Interface Structure. <i>ACS Applied Energy Materials</i> , 2019 , 2, 4098-4104	6.1	9
133	Perovskite Solar Cells: Record Open-Circuit Voltage Wide-Bandgap Perovskite Solar Cells Utilizing 2D/3D Perovskite Heterostructure (Adv. Energy Mater. 21/2019). <i>Advanced Energy Materials</i> , 2019 , 9, 1970079	21.8	7
132	Local electronic structure of the peptide bond probed by resonant inelastic soft X-ray scattering. <i>Physical Chemistry Chemical Physics</i> , 2019 , 21, 13207-13214	3.6	7
131	Record Open-Circuit Voltage Wide-Bandgap Perovskite Solar Cells Utilizing 2D/3D Perovskite Heterostructure. <i>Advanced Energy Materials</i> , 2019 , 9, 1803699	21.8	235
130	Cadmium Free Cu2ZnSnS4 Solar Cells with 9.7% Efficiency. <i>Advanced Energy Materials</i> , 2019 , 9, 1900439	21.8	42
129	Variations in the Chemical and Electronic Impact of Post-Deposition Treatments on Cu(In,Ga)(S,Se)2 Absorbers. <i>ACS Applied Energy Materials</i> , 2019 , 2, 8641-8648	6.1	1
128	Surface and Interface Properties in Thin-Film Solar Cells: Using Soft X-rays and Electrons to Unravel the Electronic and Chemical Structure. <i>Advanced Materials</i> , 2019 , 31, e1806660	24	14
127	Electrolyte Stability and Discharge Products of an Ionic-Liquid-Based LiO2 Battery Revealed by Soft X-Ray Emission Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 30827-30832	3.8	5
126	Semitransparent SbS thin film solar cells by ultrasonic spray pyrolysis for use in solar windows. <i>Beilstein Journal of Nanotechnology</i> , 2019 , 10, 2396-2409	3	12
125	Site-specific electronic structure of imidazole and imidazolium in aqueous solutions. <i>Physical Chemistry Chemical Physics</i> , 2018 , 20, 8302-8310	3.6	14
124	Improving performance by Na doping of a buffer layer—chemical and electronic structure of the InxSy:Na/CuIn(S,Se)2 thin-film solar cell interface. <i>Progress in Photovoltaics: Research and Applications</i> , 2018 , 26, 359-366	6.8	17
123	Rubidium Fluoride Post-Deposition Treatment: Impact on the Chemical Structure of the Cu(In,Ga)Se Surface and CdS/Cu(In,Ga)Se Interface in Thin-Film Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 37602-37608	9.5	11
122	Pyridine as a Resonantly Addressable Group to Study Electron-Transfer Dynamics in Self-Assembled Monolayers. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 12534-12544	3.8	7
121	Formation of a K-In-Se Surface Species by NaF/KF Postdeposition Treatment of Cu(In,Ga)Se Thin-Film Solar Cell Absorbers. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 3581-3589	9.5	70
120	Valence Electronic Structure of Li2O2, Li2O, Li2CO3, and LiOH Probed by Soft X-ray Emission Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 5460-5466	3.8	11
119	High-efficiency in situ resonant inelastic x-ray scattering (iRIXS) endstation at the Advanced Light Source. <i>Review of Scientific Instruments</i> , 2017 , 88, 033106	1.7	86

118	ZnSe/CdS Interlayer Formation at the CdS/Cu ₂ ZnSnSe ₄ Thin-Film Solar Cell Interface. <i>ACS Energy Letters</i> , 2017 , 2, 1632-1640	20.1	18
117	The effect of NaCl on room-temperature-processed indium oxide nanoparticle thin films for printed electronics. <i>Applied Surface Science</i> , 2017 , 396, 912-919	6.7	5
116	KF post-deposition treatment of industrial Cu(In, Ga)(S, Se) ₂ thin-film surfaces: Modifying the chemical and electronic structure. <i>Applied Physics Letters</i> , 2017 , 111, 071601	3.4	15
115	Impact of a RbF Postdeposition Treatment on the Electronic Structure of the CdS/Cu(In,Ga)Se ₂ Heterojunction in High-Efficiency Thin-Film Solar Cells. <i>ACS Energy Letters</i> , 2017 , 2, 2383-2387	20.1	54
114	X-ray Emission Spectroscopy of Proteinogenic Amino Acids at All Relevant Absorption Edges. <i>Journal of Physical Chemistry B</i> , 2017 , 121, 6549-6556	3.4	13
113	Band-Gap Widening at the Cu(In,Ga)(S,Se) ₂ Surface: A Novel Determination Approach Using Reflection Electron Energy Loss Spectroscopy. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 21101-5	9.5	8
112	Towards Printed Organic Light-Emitting Devices: A Solution-Stable, Highly Soluble Cu -NHetPHOS. <i>Chemistry - A European Journal</i> , 2016 , 22, 16400-16405	4.8	37
111	Soft X-ray Spectroscopy of a Complex Heterojunction in High-Efficiency Thin-Film Photovoltaics: Intermixing and Zn Speciation at the Zn(O,S)/Cu(In,Ga)Se Interface. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 33256-33263	9.5	3
110	A New Look at the Electronic Structure of Transparent Conductive Oxides: A Case Study of the Interface between Zinc Magnesium Oxide and Cadmium Telluride. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1600418	4.6	2
109	Soft X-ray and Electron Spectroscopy: A Unique Tool Chest to Characterize the Chemical and Electronic Properties of Surfaces and Interfaces 2016 , 501-522		1
108	Impact of Annealing-Induced Intermixing on the Electronic Level Alignment at the In ₂ S ₃ /Cu(In,Ga)Se ₂ Thin-Film Solar Cell Interface. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 2120-4	9.5	19
107	Electronic structure of the Zn(O,S)/Cu(In,Ga)Se ₂ thin-film solar cell interface. <i>Progress in Photovoltaics: Research and Applications</i> , 2016 , 24, 1142-1148	6.8	27
106	A closer look at initial CdS growth on high-efficiency Cu(In, Ga)Se ₂ absorbers using surface-sensitive methods 2016 ,		11
105	Isotope Effects in the Resonant Inelastic Soft X-ray Scattering Maps of Gas-Phase Methanol. <i>Journal of Physical Chemistry A</i> , 2016 , 120, 2260-7	2.8	14
104	Site- and Symmetry-Resolved Resonant X-ray Emission Study of a Highly Ordered PTCDA Thin Film. <i>Journal of Physical Chemistry C</i> , 2016 , 120, 8607-8615	3.8	1
103	Investigation of the Ionic Hydration in Aqueous Salt Solutions by Soft X-ray Emission Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2016 , 120, 7687-95	3.4	17
102	Characterization of Sulfur Bonding in CdS:O Buffer Layers for CdTe-based Thin-Film Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2015 , 7, 16382-6	9.5	29
101	Annealing-Induced Effects on the Chemical Structure of the In ₂ S ₃ /CuIn(S,Se) ₂ Thin-Film Solar Cell Interface. <i>Journal of Physical Chemistry C</i> , 2015 , 119, 10412-10416	3.8	12

100	Bridging the efficiency gap: fully bridged dinuclear Cu(I)-complexes for singlet harvesting in high-efficiency OLEDs. <i>Advanced Materials</i> , 2015 , 27, 2538-43	24	118
99	Probing hydrogen bonding orbitals: resonant inelastic soft X-ray scattering of aqueous NH ₃ . <i>Physical Chemistry Chemical Physics</i> , 2015 , 17, 27145-53	3.6	41
98	Impact of environmental conditions on the chemical surface properties of Cu(In,Ga)(S,Se) ₂ thin-film solar cell absorbers. <i>Journal of Applied Physics</i> , 2014 , 115, 183707	2.5	16
97	Ion-Solvation-Induced Molecular Reorganization in Liquid Water Probed by Resonant Inelastic Soft X-ray Scattering. <i>Journal of Physical Chemistry Letters</i> , 2014 , 5, 4143-8	6.4	27
96	Labile or stable: can homoleptic and heteroleptic PyrPHOS-copper complexes be processed from solution?. <i>Inorganic Chemistry</i> , 2014 , 53, 7837-47	5.1	57
95	Setup for in situ investigation of gases and gas/solid interfaces by soft x-ray emission and absorption spectroscopy. <i>Review of Scientific Instruments</i> , 2014 , 85, 015119	1.7	11
94	"Building block picture" of the electronic structure of aqueous cysteine derived from resonant inelastic soft X-ray scattering. <i>Journal of Physical Chemistry B</i> , 2014 , 118, 13142-50	3.4	22
93	Impact of annealing on the chemical structure and morphology of the thin-film CdTe/ZnO interface. <i>Journal of Applied Physics</i> , 2014 , 116, 024312	2.5	3
92	The heavily intermixed In ₂ S ₃ /Cu(In, Ga)Se ₂ interface as Revealed by photoelectron and soft x-ray emission spectroscopy 2013 ,		2
91	Soft X-rays shedding light on thin-film solar cell surfaces and interfaces. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2013 , 190, 47-53	1.7	6
90	RIXS investigations of liquids, solutions, and liquid/solid interfaces. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2013 , 188, 111-120	1.7	39
89	Soft X-ray and electron spectroscopy to determine the electronic structure of materials for photoelectrochemical hydrogen production. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2013 , 190, 106-112	1.7	7
88	Surface Off-Stoichiometry of CuInS ₂ Thin-Film Solar Cell Absorbers. <i>IEEE Journal of Photovoltaics</i> , 2013 , 3, 828-832	3.7	2
87	Reply to Comment on Using Photoelectron Spectroscopy and Quantum Mechanics to Determine d-Band Energies of Metals for Catalytic Applications <i>Journal of Physical Chemistry C</i> , 2013 , 117, 6916-6917	2.8	2
86	Cu _{2-x} S Surface Phases and Their Impact on the Electronic Structure of CuInS ₂ Thin Films: A Hidden Parameter in Solar Cell Optimization. <i>Advanced Energy Materials</i> , 2013 , 3, 777-781	21.8	16
85	The Be K-edge in beryllium oxide and chalcogenides: soft x-ray absorption spectra from first-principles theory and experiment. <i>Journal of Physics Condensed Matter</i> , 2013 , 25, 315501	1.8	13
84	Lateral inhomogeneity of the Mg/(Zn+Mg) composition at the (Zn,Mg)O/CuIn(S,Se) ₂ thin-film solar cell interface revealed by photoemission electron microscopy. <i>Journal of Applied Physics</i> , 2013 , 113, 193709	2.5	1
83	Non-equivalent carbon atoms in the resonant inelastic soft X-ray scattering map of cysteine. <i>Journal of Chemical Physics</i> , 2013 , 138, 034306	3.9	9

82	Using Photoelectron Spectroscopy and Quantum Mechanics to Determine d-Band Energies of Metals for Catalytic Applications. <i>Journal of Physical Chemistry C</i> , 2012 , 116, 24016-24026	3.8	75
81	Cu ₂ ZnSnS ₄ thin-film solar cell absorbers illuminated by soft x-rays. <i>Journal of Materials Research</i> , 2012 , 27, 1097-1104	2.5	14
80	Photoemission study of CdTe surfaces after low-energy ion treatments 2012 ,		2
79	Ultrafast proton dynamics in aqueous amino acid solutions studied by resonant inelastic soft X-ray scattering. <i>Journal of Physical Chemistry B</i> , 2012 , 116, 13757-64	3.4	32
78	Structural properties and x-ray photoelectron spectroscopic study of SnO ₂ nanoparticles. <i>Materials Letters</i> , 2012 , 85, 168-170	3.3	15
77	Microstructure of vanadium-based contacts on n-type GaN. <i>Journal Physics D: Applied Physics</i> , 2012 , 45, 105401	3	4
76	Nuclear dynamics and spectator effects in resonant inelastic soft x-ray scattering of gas-phase water molecules. <i>Journal of Chemical Physics</i> , 2012 , 136, 144311	3.9	58
75	Cliff-like conduction band offset and KCN-induced recombination barrier enhancement at the CdS/Cu ₂ ZnSnS ₄ thin-film solar cell heterojunction. <i>Applied Physics Letters</i> , 2011 , 99, 222105	3.4	158
74	Impact of KCN etching on the chemical and electronic surface structure of Cu ₂ ZnSnS ₄ thin-film solar cell absorbers. <i>Applied Physics Letters</i> , 2011 , 99, 152111	3.4	60
73	Native oxidation and Cu-poor surface structure of thin film Cu ₂ ZnSnS ₄ solar cell absorbers. <i>Applied Physics Letters</i> , 2011 , 99, 112103	3.4	41
72	Identification of Impurity Phases in Cu ₂ ZnSnS ₄ Thin-film Solar Cell Absorber Material by Soft X-ray Absorption Spectroscopy. <i>Materials Research Society Symposia Proceedings</i> , 2011 , 1324, 91		
71	Synthesis and characterization of conductive polyimide/carbon composites with Pt surface deposits. <i>Synthetic Metals</i> , 2011 , 161, 2368-2377	3.6	3
70	Soft X-Ray and Electron Spectroscopy: A Unique Tool Chest to Characterize the Chemical and Electronic Properties of Surfaces and Interfaces 2011 , 387-409		1
69	Electronic and chemical properties of non-vacuum deposited chalcopyrite solar cells 2011 ,		2
68	Vibronic structure in resonant Auger Raman spectroscopy of large π -conjugated molecules. <i>Chemical Physics Letters</i> , 2011 , 510, 82-86	2.5	3
67	Electron-hole correlation effects in core-level spectroscopy probed by the resonant inelastic soft x-ray scattering map of C ₆₀ . <i>Journal of Chemical Physics</i> , 2011 , 135, 104705	3.9	10
66	Electronic structure of Cu ₂ ZnSnS ₄ probed by soft x-ray emission and absorption spectroscopy. <i>Physical Review B</i> , 2011 , 84,	3.3	29
65	Nuclear dynamics in the core-excited state of aqueous ammonia probed by resonant inelastic soft x-ray scattering. <i>Physical Review B</i> , 2011 , 84,	3.3	35

64	Soft x-ray emission spectroscopy studies of the electronic structure of silicon supersaturated with sulfur. <i>Applied Physics Letters</i> , 2011 , 99, 142102	3.4	18
63	Direct determination of the band alignment at the (Zn,Mg)O/CISse interface. <i>Applied Physics Letters</i> , 2011 , 98, 142107	3.4	10
62	X-ray photoelectron spectroscopy study of the chemical interaction at the Pd/SiC interface. <i>Journal of Applied Physics</i> , 2010 , 108, 093702	2.5	4
61	Impact of solid-phase crystallization of amorphous silicon on the chemical structure of the buried Si/ZnO thin film solar cell interface. <i>Applied Physics Letters</i> , 2010 , 97, 072105	3.4	9
60	Chemical structure of vanadium-based contact formation on n-AlN. <i>Journal of Applied Physics</i> , 2010 , 108, 024906	2.5	7
59	Mo incorporation in WO ₃ thin film photoanodes: Tailoring the electronic structure for photoelectrochemical hydrogen production. <i>Applied Physics Letters</i> , 2010 , 96, 032107	3.4	21
58	Improved current collection in WO ₃ :Mo/WO ₃ bilayer photoelectrodes. <i>Journal of Materials Research</i> , 2010 , 25, 45-51	2.5	29
57	CdS/Cu(In,Ga)Se ₂ interface formation in high-efficiency thin film solar cells. <i>Applied Physics Letters</i> , 2010 , 97, 074101	3.4	21
56	Oxidation of titanium-decorated single-walled carbon nanotubes and subsequent reduction by lithium. <i>Journal of the American Chemical Society</i> , 2010 , 132, 5789-92	16.4	3
55	Sulfur gradient-driven Se diffusion at the CdS/CuIn(S,Se) ₂ solar cell interface. <i>Applied Physics Letters</i> , 2010 , 96, 182102	3.4	19
54	Nondestructive depth-resolved spectroscopic investigation of the heavily intermixed In ₂ S ₃ /Cu(In,Ga)Se ₂ interface. <i>Applied Physics Letters</i> , 2010 , 96, 184101	3.4	23
53	Effects of postdeposition treatments on surfaces of CdTe/CdS solar cells. <i>Applied Physics Letters</i> , 2010 , 97, 172109	3.4	18
52	Chemical structure of buried interfaces in CdTe thin film solar cells 2010 ,		5
51	Resonant X-ray emission spectroscopy of liquid water: Novel instrumentation, high resolution, and the map approach. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2010 , 177, 206-211	1.7	38
50	Resonant inelastic soft x-ray scattering of CdS: A two-dimensional electronic structure map approach. <i>Physical Review B</i> , 2009 , 79,	3.3	42
49	Three-dimensional structure of the buffer/absorber interface in CdS/CuGaSe ₂ based thin film solar cells. <i>Applied Physics Letters</i> , 2009 , 95, 173502	3.4	23
48	Chemical structure of the (Zn _{1-x} Mg _x)O/CuIn(S,Se) ₂ interface in thin film solar cells. <i>Applied Physics Letters</i> , 2009 , 95, 122104	3.4	6
47	Surface Modification of Tungsten Oxide-Based Photoanodes for Solar-Powered Hydrogen Production. <i>Materials Research Society Symposia Proceedings</i> , 2009 , 1171, 1		

46	Solid and liquid spectroscopic analysis (SALSA)--a soft x-ray spectroscopy endstation with a novel flow-through liquid cell. <i>Review of Scientific Instruments</i> , 2009 , 80, 123102	1.7	71
45	High-resolution, high-transmission soft x-ray spectrometer for the study of biological samples. <i>Review of Scientific Instruments</i> , 2009 , 80, 063103	1.7	71
44	Migration and oxidation of sulfur at the back contact in CdTe cells 2009 ,		2
43	Chemical and electronic surface structure of 20%-efficient Cu(In,Ga)Se ₂ thin film solar cell absorbers. <i>Applied Physics Letters</i> , 2009 , 95, 052106	3.4	54
42	Impact of air exposure on the chemical and electronic structure of ZnO:Zn ₃ N ₂ thin films. <i>Applied Physics Letters</i> , 2009 , 94, 012110	3.4	14
41	Depth-resolved band gap in Cu(In,Ga)(S,Se) ₂ thin films. <i>Applied Physics Letters</i> , 2008 , 93, 244103	3.4	65
40	Electronic Surface Level Positions of WO ₃ Thin Films for Photoelectrochemical Hydrogen Production. <i>Journal of Physical Chemistry C</i> , 2008 , 112, 3078-3082	3.8	149
39	Intermixing and chemical structure at the interface between n-GaN and V-based contacts. <i>Applied Physics Letters</i> , 2008 , 93, 172106	3.4	13
38	Electronic level alignment at the deeply buried absorber/Mo interface in chalcopyrite-based thin film solar cells. <i>Applied Physics Letters</i> , 2008 , 93, 042110	3.4	42
37	Chemical structures of the Cu(In,Ga)Se ₂ /Mo and Cu(In,Ga)(S,Se) ₂ /Mo interfaces. <i>Physical Review B</i> , 2008 , 78,	3.3	27
36	Fuchs et al. Reply:. <i>Physical Review Letters</i> , 2008 , 100,	7.4	47
35	A liquid flow cell to study the electronic structure of liquids with soft X-rays. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 2008 , 585, 172-177	1.2	45
34	Isotope and temperature effects in liquid water probed by x-ray absorption and resonant x-ray emission spectroscopy. <i>Physical Review Letters</i> , 2008 , 100, 027801	7.4	153
33	Chemical properties of the Cu(In,Ga)Se ₂ /Mo/glass interfaces in thin film solar cells. <i>Thin Solid Films</i> , 2007 , 515, 6119-6122	2.2	26
32	Resonant inelastic soft x-ray scattering, x-ray absorption spectroscopy, and density functional theory calculations of the electronic bulk band structure of CdS. <i>Physical Review B</i> , 2007 , 75,	3.3	23
31	The Mechanism of J-V Roll-Over In CdS/CdTe Devices. <i>Materials Research Society Symposia Proceedings</i> , 2007 , 1012, 1		3
30	Comparison of Band Alignments at Various CdS/Cu(In,Ga)(S,Se) ₂ Inter-Faces in Thin Film Solar Cells 2006 ,		3
29	Resonant inelastic soft x-ray scattering of Be chalcogenides. <i>Physical Review B</i> , 2006 , 73,	3.3	29

28	Spectroscopic investigation of the deeply buried Cu(In,Ga)(S,Se) ₂ /Mo interface in thin-film solar cells. <i>Journal of Chemical Physics</i> , 2006 , 124, 74705	3.9	18
27	Surface modifications of Cu(In,Ga)S ₂ thin film solar cell absorbers by KCN and H ₂ O ₂ /H ₂ SO ₄ treatments. <i>Journal of Applied Physics</i> , 2006 , 100, 024907	2.5	28
26	The electronic structure of the [Zn(S,O)/ZnS]/CuInS ₂ heterointerface – Impact of post-annealing. <i>Chemical Physics Letters</i> , 2006 , 433, 71-74	2.5	28
25	Chemical insights into the Cd ²⁺ /NH ₃ treatment – An approach to explain the formation of Cd-compounds on Cu(In,Ga)(S,Se) ₂ absorbers. <i>Solar Energy Materials and Solar Cells</i> , 2006 , 90, 3151-3157	6.4	12
24	Band alignment at the CdS/Cu(In,Ga)S ₂ interface in thin-film solar cells. <i>Applied Physics Letters</i> , 2005 , 86, 062109	3.4	70
23	Cd ²⁺ /NH ₃ treatment-induced formation of a CdSe surface layer on CuGaSe ₂ thin-film solar cell absorbers. <i>Applied Physics Letters</i> , 2005 , 86, 222107	3.4	16
22	Inducing and monitoring photoelectrochemical reactions at surfaces and buried interfaces in Cu(In,Ga)(S,Se) ₂ thin-film solar cells. <i>Applied Physics Letters</i> , 2005 , 86, 172102	3.4	22
21	Zn(O,OH) layers in chalcopyrite thin-film solar cells: Valence-band maximum versus composition. <i>Journal of Applied Physics</i> , 2005 , 98, 053702	2.5	33
20	Spectroscopic analysis of CIGS ₂ /CdS thin film solar cell heterojunctions on stainless steel foil. <i>Journal of Physics and Chemistry of Solids</i> , 2005 , 66, 1872-1875	3.9	5
19	Cd ²⁺ /NH ₃ treatment of Cu(In,Ga)(S,Se) ₂ thin-film solar cell absorbers: a model for the performance-enhancing processes in the partial electrolyte. <i>Progress in Photovoltaics: Research and Applications</i> , 2005 , 13, 571-577	6.8	15
18	Ultrafast core-hole-induced dynamics in water probed by x-ray emission spectroscopy. <i>Physical Review Letters</i> , 2005 , 94, 227401	7.4	111
17	The valence electronic structure of zinc oxide powders as determined by X-ray emission spectroscopy: variation of electronic structure with particle size. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2004 , 134, 183-189	1.7	13
16	Soft X-ray Induced Decomposition of Phenylalanine and Tyrosine: A Comparative Study. <i>Journal of Physical Chemistry A</i> , 2004 , 108, 4557-4565	2.8	94
15	Soft X-ray-induced decomposition of amino acids: an XPS, mass spectrometry, and NEXAFS study. <i>Radiation Research</i> , 2004 , 161, 346-58	3.1	123
14	Band alignment at the i-ZnO/CdS interface in Cu(In,Ga)(S,Se) ₂ thin-film solar cells. <i>Applied Physics Letters</i> , 2004 , 84, 3175-3177	3.4	56
13	Analysis of Zinc Compound Buffer Layers in Cu(In, Ga)(S, Se) ₂ Thin Film Solar Cells by Synchrotron-Based Soft X-Ray Spectroscopy. <i>Materials Research Society Symposia Proceedings</i> , 2003 , 763, 451		15
12	Synthesis, structure and spectroscopic characterization of water-soluble CdS nanoparticles. <i>Chemical Physics Letters</i> , 2003 , 379, 443-451	2.5	52
11	Impact of Cd ²⁺ -treatment on the band alignment at the ILGAR-ZnO/CuIn(S,Se) ₂ heterojunction. <i>Thin Solid Films</i> , 2003 , 431-432, 272-276	2.2	24

10	Surface and bulk properties of CuGaSe ₂ thin films. <i>Journal of Physics and Chemistry of Solids</i> , 2003 , 64, 1553-1557	3.9	35
9	Enhancement of photoluminescence in manganese-doped ZnS nanoparticles due to a silica shell. <i>Journal of Chemical Physics</i> , 2003 , 118, 8945-8953	3.9	73
8	Monitoring chemical reactions at a liquid-solid interface: Water on CuIn(S,Se) ₂ thin film solar cell absorbers. <i>Journal of Chemical Physics</i> , 2003 , 119, 10467-10470	3.9	30
7	Influence of As passivation on the electronic level alignment at BeTe/Si(111) interfaces. <i>Physical Review B</i> , 2003 , 67,	3.3	7
6	Studying the local chemical environment of sulfur atoms at buried interfaces in CdS/ZnSe superlattices. <i>Applied Physics Letters</i> , 2003 , 83, 2360-2362	3.4	11
5	CdS and Cd(OH) ₂ formation during Cd treatments of Cu(In,Ga)(S,Se) ₂ thin-film solar cell absorbers. <i>Applied Physics Letters</i> , 2003 , 82, 571-573	3.4	65
4	Damp-heat induced sulfate formation in Cu(In,Ga)(S,Se) ₂ -based thin film solar cells. <i>Applied Physics Letters</i> , 2002 , 81, 4550-4552	3.4	24
3	Energy level alignment at zinc blende Cd(Mn)Se/ZnTe/InAs(100) interfaces. <i>Applied Physics Letters</i> , 2002 , 81, 3813-3815	3.4	12
2	Flat conduction-band alignment at the CdS/CuInSe ₂ thin-film solar-cell heterojunction. <i>Applied Physics Letters</i> , 2001 , 79, 4482-4484	3.4	203
1	X-ray and Electron Spectroscopy Studies of Oxide Semiconductors for Photoelectrochemical Hydrogen Production 143-161		