Clemens Heske

List of Publications by Citations

156 papers	5,533 citations	39 h-index	69 g-index
170 ext. papers	5,994 ext. citations	4.5 avg, IF	4.86 L-index

#	Paper	IF	Citations
156	Accelerating materials development for photoelectrochemical hydrogen production: Standards for methods, definitions, and reporting protocols. *Journal of Materials Research*, **2010**, 25, 3-16	2.5	893
155	Spectroscopic probing of local hydrogen-bonding structures in liquid water. *Journal of Physics Condensed Matter*, **2002**, 14, L213-L219	1.8	243
154	Flat conduction-band alignment at the CdS/CuInSe2 thin-film solar-cell heterojunction. *Applied Physics Letters*, **2001**, 79, 4482-4484	3.4	203
153	Cliff-like conduction band offset and KCN-induced recombination barrier enhancement at the CdS/Cu2ZnSnS4 thin-film solar cell heterojunction. *Applied Physics Letters*, **2011**, 99, 222105	3.4	158
152	Isotope and temperature effects in liquid water probed by x-ray absorption and resonant x-ray emission spectroscopy. *Physical Review Letters*, **2008**, 100, 027801	7.4	153
151	Electronic Surface Level Positions of WO3 Thin Films for Photoelectrochemical Hydrogen Production. *Journal of Physical Chemistry C*, **2008**, 112, 3078-3082	3.8	149
150	Soft X-ray-induced decomposition of amino acids: an XPS, mass spectrometry, and NEXAFS study. *Radiation Research*, **2004**, 161, 346-58	3.1	123
149	Bridging the efficiency gap: fully bridged dinuclear Cu(I)-complexes for singlet harvesting in high-efficiency OLEDs. *Advanced Materials*, **2015**, 27, 2538-43	24	118
148	Observation of intermixing at the buried CdS/Cu(In, Ga)Se2 thin film solar cell heterojunction. *Applied Physics Letters*, **1999**, 74, 1451-1453	3.4	118
147	Ultrafast core-hole-induced dynamics in water probed by x-ray emission spectroscopy. *Physical Review Letters*, **2005**, 94, 227401	7.4	111
146	Soft X-ray Induced Decomposition of Phenylalanine and Tyrosine: A Comparative Study. *Journal of Physical Chemistry A*, **2004**, 108, 4557-4565	2.8	94
145	High-efficiency in situ resonant inelastic x-ray scattering (iRIXS) endstation at the Advanced Light Source. *Review of Scientific Instruments*, **2017**, 88, 033106	1.7	86
144	Finding Correlations of the Oxygen Reduction Reaction Activity of Transition Metal Catalysts with Parameters Obtained from Quantum Mechanics. *Journal of Physical Chemistry C*, **2013**, 117, 26598-26607	3.8	83
143	Na-induced effects on the electronic structure and composition of Cu(In,Ga)Se2 thin-film surfaces. *Applied Physics Letters*, **1996**, 68, 3431-3433	3.4	76
142	Using Photoelectron Spectroscopy and Quantum Mechanics to Determine d-Band Energies of Metals for Catalytic Applications. *Journal of Physical Chemistry C*, **2012**, 116, 24016-24026	3.8	75
141	Solid and liquid spectroscopic analysis (SALSA)--a soft x-ray spectroscopy endstation with a novel flow-through liquid cell. *Review of Scientific Instruments*, **2009**, 80, 123102	1.7	71
140	High-resolution, high-transmission soft x-ray spectrometer for the study of biological samples. *Review of Scientific Instruments*, **2009**, 80, 063103	1.7	71

139	Formation of a K-In-Se Surface Species by NaF/KF Postdeposition Treatment of Cu(In,Ga)Se Thin-Film Solar Cell Absorbers. *ACS Applied Materials & Interfaces*, **2017**, 9, 3581-3589	9.5	70
138	Band alignment at the CdS□Cu(In,Ga)S2 interface in thin-film solar cells. *Applied Physics Letters*, **2005**, 86, 062109	3.4	70
137	Depth-resolved band gap in Cu(In,Ga)(S,Se)2 thin films. *Applied Physics Letters*, **2008**, 93, 244103	3.4	65
136	CdS and Cd(OH)2 formation during Cd treatments of Cu(In,Ga)(S,Se)2 thin-film solar cell absorbers. *Applied Physics Letters*, **2003**, 82, 571-573	3.4	65
135	Impact of KCN etching on the chemical and electronic surface structure of Cu2ZnSnS4 thin-film solar cell absorbers. *Applied Physics Letters*, **2011**, 99, 152111	3.4	60
134	Surface chemistry of ultrathin films of histidine on gold as probed by high-resolution synchrotron photoemission. *Journal of Physical Chemistry B*, **2005**, 109, 884-91	3.4	60
133	Nuclear dynamics and spectator effects in resonant inelastic soft x-ray scattering of gas-phase water molecules. *Journal of Chemical Physics*, **2012**, 136, 144311	3.9	58
132	Labile or stable: can homoleptic and heteroleptic PyrPHOS-copper complexes be processed from solution?. *Inorganic Chemistry*, **2014**, 53, 7837-47	5.1	57
131	Band widening in graphite. *Physical Review B*, **1999**, 59, 4680-4684	3.3	57
130	Band alignment at the i-ZnO/CdS interface in Cu(In,Ga)(S,Se)2 thin-film solar cells. *Applied Physics Letters*, **2004**, 84, 3175-3177	3.4	56
129	Impact of a RbF Postdeposition Treatment on the Electronic Structure of the CdS/Cu(In,Ga)Se2 Heterojunction in High-Efficiency Thin-Film Solar Cells. *ACS Energy Letters*, **2017**, 2, 2383-2387	20.1	54
128	Chemical and electronic surface structure of 20%-efficient Cu(In,Ga)Se2 thin film solar cell absorbers. *Applied Physics Letters*, **2009**, 95, 052106	3.4	54
127	Fuchs et al. Reply:. *Physical Review Letters*, **2008**, 100,	7.4	47
126	Bonding and structure of glycine on ordered Al2O3 film surfaces. *Langmuir*, **2004**, 20, 10551-9	4	47
125	A liquid flow cell to study the electronic structure of liquids with soft X-rays. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2008**, 585, 172-177	1.2	45
124	Cadmium Free Cu2ZnSnS4 Solar Cells with 9.7% Efficiency. *Advanced Energy Materials*, **2019**, 9, 1900439	21.8	42
123	Resonant inelastic soft x-ray scattering of CdS: A two-dimensional electronic structure map approach. *Physical Review B*, **2009**, 79,	3.3	42
122	Electronic level alignment at the deeply buried absorber/Mo interface in chalcopyrite-based thin film solar cells. *Applied Physics Letters*, **2008**, 93, 042110	3.4	42

121	Probing hydrogen bonding orbitals: resonant inelastic soft X-ray scattering of aqueous NH3. *Physical Chemistry Chemical Physics*, **2015**, 17, 27145-53	3.6	41
120	Native oxidation and Cu-poor surface structure of thin film Cu2ZnSnS4 solar cell absorbers. *Applied Physics Letters*, **2011**, 99, 112103	3.4	41
119	Influence of Na and H2O on the surface properties of Cu(In,Ga)Se2 thin films. *Journal of Applied Physics*, **1997**, 82, 2411-2420	2.5	40
118	RIXS investigations of liquids, solutions, and liquid/solid interfaces. *Journal of Electron Spectroscopy and Related Phenomena*, **2013**, 188, 111-120	1.7	39
117	Resonant X-ray emission spectroscopy of liquid water: Novel instrumentation, high resolution, and the □hap□approach. *Journal of Electron Spectroscopy and Related Phenomena*, **2010**, 177, 206-211	1.7	38
116	Towards Printed Organic Light-Emitting Devices: A Solution-Stable, Highly Soluble Cu -NHetPHOS. *Chemistry - A European Journal*, **2016**, 22, 16400-16405	4.8	37
115	X-ray photoemission and photoabsorption of organic electroluminescent materials. *Journal of Applied Physics*, **1999**, 86, 88-93	2.5	36
114	Nuclear dynamics in the core-excited state of aqueous ammonia probed by resonant inelastic soft x-ray scattering. *Physical Review B*, **2011**, 84,	3.3	35
113	Zn(O,OH) layers in chalcopyrite thin-film solar cells: Valence-band maximum versus composition. *Journal of Applied Physics*, **2005**, 98, 053702	2.5	33
112	Ultrafast proton dynamics in aqueous amino acid solutions studied by resonant inelastic soft X-ray scattering. *Journal of Physical Chemistry B*, **2012**, 116, 13757-64	3.4	32
111	Formation of the ZnSe/(Te/)GaAs(100) heterojunction. *Surface Science*, **2003**, 531, 77-85	1.8	32
110	Monitoring chemical reactions at a liquid□olid interface: Water on CuIn(S,Se)2 thin film solar cell absorbers. *Journal of Chemical Physics*, **2003**, 119, 10467-10470	3.9	30
109	X-Ray Emission Spectroscopy of Cu(In,Ga)(S,Se)2-Based Thin Film Solar Cells: Electronic Structure, Surface Oxidation, and Buried Interfaces. *Physica Status Solidi A*, **2001**, 187, 13-24		30
108	Characterization of Sulfur Bonding in CdS:O Buffer Layers for CdTe-based Thin-Film Solar Cells. *ACS Applied Materials & Interfaces*, **2015**, 7, 16382-6	9.5	29
107	Improved current collection in WO3:Mo/WO3 bilayer photoelectrodes. *Journal of Materials Research*, **2010**, 25, 45-51	2.5	29
106	Electronic structure of Cu2ZnSnS4 probed by soft x-ray emission and absorption spectroscopy. *Physical Review B*, **2011**, 84,	3.3	29
105	Resonant inelastic soft x-ray scattering of Be chalcogenides. *Physical Review B*, **2006**, 73,	3.3	29
104	Ethylene on Cu(110) and Ni(110): electronic structure and bonding derived from X-ray spectroscopy and theory. *Surface Science*, **2004**, 559, 85-99	1.8	29

103	Localization of Na impurities at the buried CdS/Cu(In, Ga)Se2 heterojunction. *Applied Physics Letters* , **1999**, 75, 2082-2084	3.4	29
102	Surface modifications of Cu(In,Ga)S2 thin film solar cell absorbers by KCN and H2O2H2SO4 treatments. *Journal of Applied Physics*, **2006**, 100, 024907	2.5	28
101	The electronic structure of the [Zn(S,O)/ZnS]/CuInS2 heterointerface Impact of post-annealing. *Chemical Physics Letters*, **2006**, 433, 71-74	2.5	28
100	Ion-Solvation-Induced Molecular Reorganization in Liquid Water Probed by Resonant Inelastic Soft X-ray Scattering. *Journal of Physical Chemistry Letters*, **2014**, 5, 4143-8	6.4	27
99	Chemical structures of the Cu(In,Ga)Se2/Mo and Cu(In,Ga)(S,Se)2/Mo interfaces. *Physical Review B*, **2008**, 78,	3.3	27
98	Electronic structure of the Zn(O,S)/Cu(In,Ga)Se2 thin-film solar cell interface. *Progress in Photovoltaics: Research and Applications*, **2016**, 24, 1142-1148	6.8	27
97	Chemical properties of the Cu(In,Ga)Se2/Mo/glass interfaces in thin film solar cells. *Thin Solid Films*, **2007**, 515, 6119-6122	2.2	26
96	Impact of Cd2+-treatment on the band alignment at the ILGAR-ZnO/CuIn(S,Se)2 heterojunction. *Thin Solid Films*, **2003**, 431-432, 272-276	2.2	24
95	Damp-heat induced sulfate formation in Cu(In,Ga)(S,Se)2-based thin film solar cells. *Applied Physics Letters*, **2002**, 81, 4550-4552	3.4	24
94	Nondestructive depth-resolved spectroscopic investigation of the heavily intermixed In2S3/Cu(In,Ga)Se2 interface. *Applied Physics Letters*, **2010**, 96, 184101	3.4	23
93	Three-dimensional structure of the buffer/absorber interface in CdS/CuGaSe2 based thin film solar cells. *Applied Physics Letters*, **2009**, 95, 173502	3.4	23
92	Resonant inelastic soft x-ray scattering, x-ray absorption spectroscopy, and density functional theory calculations of the electronic bulk band structure of CdS. *Physical Review B*, **2007**, 75,	3.3	23
91	"Building block picture" of the electronic structure of aqueous cysteine derived from resonant inelastic soft X-ray scattering. *Journal of Physical Chemistry B*, **2014**, 118, 13142-50	3.4	22
90	Inducing and monitoring photoelectrochemical reactions at surfaces and buried interfaces in Cu(In,Ga)(S,Se)2 thin-film solar cells. *Applied Physics Letters*, **2005**, 86, 172102	3.4	22
89	Mo incorporation in WO3 thin film photoanodes: Tailoring the electronic structure for photoelectrochemical hydrogen production. *Applied Physics Letters*, **2010**, 96, 032107	3.4	21
88	CdS/Cu(In,Ga)Se2 interface formation in high-efficiency thin film solar cells. *Applied Physics Letters*, **2010**, 97, 074101	3.4	21
87	Organogels from functionalized T-shaped pi-conjugated bisphenazines. *Langmuir*, **2010**, 26, 13630-6	4	21
86	Impact of Annealing-Induced Intermixing on the Electronic Level Alignment at the In2S3/Cu(In,Ga)Se2 Thin-Film Solar Cell Interface. *ACS Applied Materials & Interfaces*, **2016**, 8, 2120-4	9.5	19

85	Sulfur gradient-driven Se diffusion at the CdS/CuIn(S,Se)2 solar cell interface. *Applied Physics Letters*, **2010**, 96, 182102	3.4	19
84	ZnSeCdS Interlayer Formation at the CdS/Cu2ZnSnSe4 Thin-Film Solar Cell Interface. *ACS Energy Letters*, **2017**, 2, 1632-1640	20.1	18
83	Effects of postdeposition treatments on surfaces of CdTe/CdS solar cells. *Applied Physics Letters*, **2010**, 97, 172109	3.4	18
82	Soft x-ray emission spectroscopy studies of the electronic structure of silicon supersaturated with sulfur. *Applied Physics Letters*, **2011**, 99, 142102	3.4	18
81	Spectroscopic investigation of the deeply buried Cu(In,Ga)(S,Se)2/Mo interface in thin-film solar cells. *Journal of Chemical Physics*, **2006**, 124, 74705	3.9	18
80	Improving performance by Na doping of a buffer layerhemical and electronic structure of the InxSy:Na/CuIn(S,Se)2 thin-film solar cell interface. *Progress in Photovoltaics: Research and Applications*, **2018**, 26, 359-366	6.8	17
79	X-ray emission spectroscopy of NO adsorbates on Ru(001). *Surface Science*, **2000**, 448, 164-178	1.8	17
78	Investigation of the Ionic Hydration in Aqueous Salt Solutions by Soft X-ray Emission Spectroscopy. *Journal of Physical Chemistry B*, **2016**, 120, 7687-95	3.4	17
77	Impact of environmental conditions on the chemical surface properties of Cu(In,Ga)(S,Se)2 thin-film solar cell absorbers. *Journal of Applied Physics*, **2014**, 115, 183707	2.5	16
76	Controlling the electron-deficiency of self-assembling pyrazine-acenes: a collaborative experimental and theoretical investigation. *Physical Chemistry Chemical Physics*, **2013**, 15, 5967-74	3.6	16
75	Cu2-xS Surface Phases and Their Impact on the Electronic Structure of CuInS2 Thin Films A Hidden Parameter in Solar Cell Optimization. *Advanced Energy Materials*, **2013**, 3, 777-781	21.8	16
74	Cd2+NH3 treatment-induced formation of a CdSe surface layer on CuGaSe2 thin-film solar cell absorbers. *Applied Physics Letters*, **2005**, 86, 222107	3.4	16
73	Molybdenum Disulfide Catalytic Coatings via Atomic Layer Deposition for Solar Hydrogen Production from Copper Gallium Diselenide Photocathodes. *ACS Applied Energy Materials*, **2019**, 2, 1060-1066	6.1	15
72	KF post-deposition treatment of industrial Cu(In, Ga)(S, Se)2 thin-film surfaces: Modifying the chemical and electronic structure. *Applied Physics Letters*, **2017**, 111, 071601	3.4	15
71	Cd2+/NH3 treatment of Cu(In,Ga)(S,Se)2 thin-film solar cell absorbers: a model for the performance-enhancing processes in the partial electrolyte. *Progress in Photovoltaics: Research and Applications*, **2005**, 13, 571-577	6.8	15
70	Reduction of the ZnSe/GaAs(100) valence band offset by a Te interlayer. *Applied Physics Letters*, **2001**, 78, 1867-1869	3.4	15
69	Site-specific electronic structure of imidazole and imidazolium in aqueous solutions. *Physical Chemistry Chemical Physics*, **2018**, 20, 8302-8310	3.6	14
68	Cu2ZnSnS4 thin-film solar cell absorbers illuminated by soft x-rays. *Journal of Materials Research*, **2012**, 27, 1097-1104	2.5	14

67	Impact of air exposure on the chemical and electronic structure of ZnO:Zn3N2 thin films. *Applied Physics Letters*, **2009**, 94, 012110	3.4	14
66	Isotope Effects in the Resonant Inelastic Soft X-ray Scattering Maps of Gas-Phase Methanol. *Journal of Physical Chemistry A*, **2016**, 120, 2260-7	2.8	14
65	Surface and Interface Properties in Thin-Film Solar Cells: Using Soft X-rays and Electrons to Unravel the Electronic and Chemical Structure. *Advanced Materials*, **2019**, 31, e1806660	24	14
64	X-ray Emission Spectroscopy of Proteinogenic Amino Acids at All Relevant Absorption Edges. *Journal of Physical Chemistry B*, **2017**, 121, 6549-6556	3.4	13
63	The Be K-edge in beryllium oxide and chalcogenides: soft x-ray absorption spectra from first-principles theory and experiment. *Journal of Physics Condensed Matter*, **2013**, 25, 315501	1.8	13
62	Intermixing and chemical structure at the interface between n-GaN and V-based contacts. *Applied Physics Letters*, **2008**, 93, 172106	3.4	13
61	The valence electronic structure of zinc oxide powders as determined by X-ray emission spectroscopy: variation of electronic structure with particle size. *Journal of Electron Spectroscopy and Related Phenomena*, **2004**, 134, 183-189	1.7	13
60	Annealing-Induced Effects on the Chemical Structure of the In2S3/CuIn(S,Se)2 Thin-Film Solar Cell Interface. *Journal of Physical Chemistry C*, **2015**, 119, 10412-10416	3.8	12
59	Chemical insights into the Cd2+/NH3 treatment: An approach to explain the formation of Cd-compounds on Cu(In,Ga)(S,Se)2 absorbers. *Solar Energy Materials and Solar Cells*, **2006**, 90, 3151-3157	6.4	12
58	Semitransparent SbS thin film solar cells by ultrasonic spray pyrolysis for use in solar windows. *Beilstein Journal of Nanotechnology*, **2019**, 10, 2396-2409	3	12
57	Valence Electronic Structure of Li2O2, Li2O, Li2CO3, and LiOH Probed by Soft X-ray Emission Spectroscopy. *Journal of Physical Chemistry C*, **2017**, 121, 5460-5466	3.8	11
56	Setup for in situ investigation of gases and gas/solid interfaces by soft x-ray emission and absorption spectroscopy. *Review of Scientific Instruments*, **2014**, 85, 015119	1.7	11
55	Semi-quantitative and non-destructive analysis of impurities at a buried interface: Na and the CdS/Cu(In,Ga)Se2 heterojunction. *Surface and Interface Analysis*, **2000**, 30, 459-463	1.5	11
54	A closer look at initial CdS growth on high-efficiency Cu(In, Ga)Se2 absorbers using surface-sensitive methods **2016**,		11
53	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. *ACS Applied Materials & Interfaces*, **2018**, 10, 37602-37608	9.5	11
52	Electron-hole correlation effects in core-level spectroscopy probed by the resonant inelastic soft x-ray scattering map of C60. *Journal of Chemical Physics*, **2011**, 135, 104705	3.9	10
51	Spectroscopic investigation of buried interfaces and liquids with soft X-rays. *Applied Physics A: Materials Science and Processing*, **2004**, 78, 829-835	2.6	10
50	Self-limitation of Na content at the CdS/Cu(In,Ga)Se 2 solar cell heterojunction. *Thin Solid Films*, **2000**, 361-362, 360-363	2.2	10

49	Intermixing at the InxSy/Cu2ZnSn(S,Se)4 Heterojunction and Its Impact on the Chemical and Electronic Interface Structure. *ACS Applied Energy Materials*, **2019**, 2, 4098-4104	6.1	9
48	Non-equivalent carbon atoms in the resonant inelastic soft X-ray scattering map of cysteine. *Journal of Chemical Physics*, **2013**, 138, 034306	3.9	9
47	Impact of solid-phase crystallization of amorphous silicon on the chemical structure of the buried Si/ZnO thin film solar cell interface. *Applied Physics Letters*, **2010**, 97, 072105	3.4	9
46	Bimetallic Palladium-Base Metal Nanoparticle Oxygen Reduction Electrocatalysts. *ECS Transactions*, **2009**, 16, 109-119	1	9
45	Modifications of the CZTSe/Mo back-contact interface by plasma treatments.. *RSC Advances*, **2019**, 9, 26850-26855	3.7	8
44	Band-Gap Widening at the Cu(In,Ga)(S,Se)2 Surface: A Novel Determination Approach Using Reflection Electron Energy Loss Spectroscopy. *ACS Applied Materials & Interfaces*, **2016**, 8, 21101-5	9.5	8
43	Local electronic structure of the peptide bond probed by resonant inelastic soft X-ray scattering. *Physical Chemistry Chemical Physics*, **2019**, 21, 13207-13214	3.6	7
42	Soft X-ray and electron spectroscopy to determine the electronic structure of materials for photoelectrochemical hydrogen production. *Journal of Electron Spectroscopy and Related Phenomena*, **2013**, 190, 106-112	1.7	7
41	Chemical structure of vanadium-based contact formation on n-AlN. *Journal of Applied Physics*, **2010**, 108, 024906	2.5	7
40	Soft X-rays shedding light on thin-film solar cell surfaces and interfaces. *Journal of Electron Spectroscopy and Related Phenomena*, **2013**, 190, 47-53	1.7	6
39	Observation of Double Excitations in the Resonant Inelastic X-ray Scattering of Nitric Oxide. *Journal of Physical Chemistry Letters*, **2020**, 11, 7476-7482	6.4	6
38	The effect of NaCl on room-temperature-processed indium oxide nanoparticle thin films for printed electronics. *Applied Surface Science*, **2017**, 396, 912-919	6.7	5
37	Chemical structure of buried interfaces in CdTe thin film solar cells **2010**,		5
36	Electrolyte Stability and Discharge Products of an Ionic-Liquid-Based Li□2 Battery Revealed by Soft X-Ray Emission Spectroscopy. *Journal of Physical Chemistry C*, **2019**, 123, 30827-30832	3.8	5
35	Microstructure of vanadium-based contacts on n-type GaN. *Journal Physics D: Applied Physics*, **2012**, 45, 105401	3	4
34	X-ray photoelectron spectroscopy study of the chemical interaction at the Pd/SiC interface. *Journal of Applied Physics*, **2010**, 108, 093702	2.5	4
33	Dynamic Effects and Hydrogen Bonding in Mixed-Halide Perovskite Solar Cell Absorbers. *Journal of Physical Chemistry Letters*, **2021**, 12, 3885-3890	6.4	4
32	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. *ACS Applied Materials & Interfaces*, **2016**, 8, 33256-33263	9.5	3

31	Impact of annealing on the chemical structure and morphology of the thin-film CdTe/ZnO interface. *Journal of Applied Physics*, **2014**, 116, 024312	2.5	3
30	Oxidation of titanium-decorated single-walled carbon nanotubes and subsequent reduction by lithium. *Journal of the American Chemical Society*, **2010**, 132, 5789-92	16.4	3
29	Comparison of Band Alignments at Various CdS/Cu(In,Ga)(S,Se)2 Inter-Faces in Thin Film Solar Cells **2006**,		3
28	The Mechanism of J-V Roll-Over In CdS/CdTe Devices. *Materials Research Society Symposia Proceedings*, **2007**, 1012, 1		3
27	Impact of -Butylammonium Bromide on the Chemical and Electronic Structure of Double-Cation Perovskite Thin Films. *ACS Applied Materials & Interfaces*, **2021**,	9.5	3
26	X-SPEC: a 70 eV to 15 keV undulator beamline for X-ray and electron spectroscopies. *Journal of Synchrotron Radiation*, **2021**, 28, 609-617	2.4	3
25	A New Look at the Electronic Structure of Transparent Conductive Oxides: A Case Study of the Interface between Zinc Magnesium Oxide and Cadmium Telluride. *Advanced Materials Interfaces*, **2016**, 3, 1600418	4.6	2
24	The heavily intermixed In2S3/Cu(In, Ga)Se2 interface as Revealed by photoelectron and soft x-ray emission spectroscopy **2013**,		2
23	Surface Off-Stoichiometry of CuInS$_{2}$ Thin-Film Solar Cell Absorbers. *IEEE Journal of Photovoltaics*, **2013**, 3, 828-832	3.7	2
22	Photoemission study of CdTe surfaces after low-energy ion treatments **2012**,		2
21	Reply to "Comment on "Using Photoelectron Spectroscopy and Quantum Mechanics to Determine d-Band Energies of Metals for Catalytic Applications"" *Journal of Physical Chemistry C*, **2013**, 117, 6916-6917	3.8	2
20	Electronic and chemical properties of non-vacuum deposited chalcopyrite solar cells **2011**,		2
19	Migration and oxidation of sulfur at the back contact in CdTe cells **2009**,		2
18	Steep sulfur gradient in CZTSSe solar cells by HS-assisted rapid surface sulfurization.. *RSC Advances*, **2021**, 11, 12687-12695	3.7	2
17	Hybrid chemical bath deposition-CdS/sputter-Zn(O,S) alternative buffer for Cu2ZnSn(S,Se)4 based solar cells. *Journal of Applied Physics*, **2020**, 127, 165301	2.5	1
16	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
15	Variations in the Chemical and Electronic Impact of Post-Deposition Treatments on Cu(In,Ga)(S,Se)2 Absorbers. *ACS Applied Energy Materials*, **2019**, 2, 8641-8648	6.1	1
14	Status of the development of superconducting undulators at ANKA. *Journal of Physics: Conference Series*, **2013**, 425, 032008	0.3	1

13	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
12	Angle-resolved photoemission on ZnSe(001): determination of conduction band quasiparticle shifts. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2007**, 4, 3204-3209		1
11	Sulfurization as a promising surface passivation approach for both n- and p-type Si **2020**,		1
10	Impact of substrate temperature during NaF and KF post-deposition treatments on chemical and optoelectronic properties of alkali-free Cu(In,Ga)Se2 thin film solar cell absorbers. *Thin Solid Films*, **2021**, 739, 138979	2.2	1
9	Impact of UV-induced ozone and low-energy Ar+-ion cleaning on the chemical structure of Cu(In,Ga)(S,Se)2 absorber surfaces. *Journal of Applied Physics*, **2020**, 128, 155301	2.5	1
8	Chemical Structure of a Carbon-Rich Layer at the Wet-Chemical Processed Cu2ZnSn(S,Se)4/Mo Interface. *IEEE Journal of Photovoltaics*, **2021**, 11, 658-663	3.7	1
7	Sulfate Speciation Analysis Using Soft X-ray Emission Spectroscopy. *Analytical Chemistry*, **2021**, 93, 8300-8308	7.8	1
6	Site- and Symmetry-Resolved Resonant X-ray Emission Study of a Highly Ordered PTCDA Thin Film. *Journal of Physical Chemistry C*, **2016**, 120, 8607-8615	3.8	1
5	Coupling Methylammonium and Formamidinium Cations with Halide Anions: Hybrid Orbitals, Hydrogen Bonding, and the Role of Dynamics. *Journal of Physical Chemistry C*, **2021**, 125, 25917-25926	3.8	0
4	Using the inelastic background in hard x-ray photoelectron spectroscopy for a depth-resolved analysis of the CdS/Cu(In,Ga)Se2 interface. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2021**, 39, 063216	2.9	0
3	Identification of Impurity Phases in Cu2ZnSnS4 Thin-film Solar Cell Absorber Material by Soft X-ray Absorption Spectroscopy. *Materials Research Society Symposia Proceedings*, **2011**, 1324, 91		
2	Photon Science at the ALS for Sustainable Energy. *Synchrotron Radiation News*, **2010**, 23, 8-15	0.6	
1	X-ray and Electron Spectroscopy Studies of Oxide Semiconductors for Photoelectrochemical Hydrogen Production143-161		