Martin Ledinsky

List of Publications by Year in Descending Order

103 papers	3,700 citations	21 h-index	59 g-index
111 ext. papers	4,175 ext. citations	4.2 avg, IF	5 L-index

#	Paper	IF	Citations
103	Combined Photoluminescence and X-ray Scattering Reveals Defect Formation in Lead-Halide Perovskite Films. *Journal of Physical Chemistry Letters*, **2021**, 12, 10156-10162	6.4	3
102	Size Effects on Surface Chemistry and Raman Spectra of Sub-5 nm Oxidized High-Pressure High-Temperature and Detonation Nanodiamonds. *Journal of Physical Chemistry C*, **2021**, 125, 5647-5669	3.8	5
101	In-depth distribution of elements and chemical bonds in the surface region of calcium-doped diamond-like carbon films. *Applied Surface Science*, **2021**, 539, 148250	6.7	3
100	Nanoscale Study of the Hole-Selective Passivating Contacts with High Thermal Budget Using C-AFM Tomography. *ACS Applied Materials & Interfaces*, **2021**, 13, 9994-10000	9.5	0
99	On the Origin of Reduced Cytotoxicity of Germanium-Doped Diamond-Like Carbon: Role of Top Surface Composition and Bonding. *Nanomaterials*, **2021**, 11,	5.4	1
98	Pulsed Laser Deposition of CsAgBiBr: from Mechanochemically Synthesized Powders to Dry, Single-Step Deposition. *Chemistry of Materials*, **2021**, 33, 7417-7422	9.6	8
97	Impact of Cation Multiplicity on Halide Perovskite Defect Densities and Solar Cell Voltages. *Journal of Physical Chemistry C*, **2020**, 124, 27333-27339	3.8	7
96	Single-Source, Solvent-Free, Room Temperature Deposition of Black CsSnI3 Films. *Advanced Materials Interfaces*, **2020**, 7, 2000162	4.6	20
95	Transferless Inverted Graphene/Silicon Heterostructures Prepared by Plasma-Enhanced Chemical Vapor Deposition of Amorphous Silicon on CVD Graphene. *Nanomaterials*, **2020**, 10,	5.4	1
94	Growth defects in WC:H layers for tribological applications. *Vacuum*, **2020**, 178, 109372	3.7	
93	Controlled Growth of Large Grains in CH3NH3PbI3 Perovskite Films Mediated by an Intermediate Liquid Phase without an Antisolvent for Efficient Solar Cells. *ACS Applied Energy Materials*, **2020**, 3, 12484-12493	6.1	8
92	How Humidity and Light Exposure Change the Photophysics of Metal Halide Perovskite Solar Cells. *Solar Rrl*, **2020**, 4, 2000382	7.1	13
91	Temperature Dependence of the Urbach Energy in Lead Iodide Perovskites. *Journal of Physical Chemistry Letters*, **2019**, 10, 1368-1373	6.4	116
90	Infrared spectroscopic properties of low-phonon lanthanide-doped KLuS2 crystals. *Journal of Luminescence*, **2019**, 211, 100-107	3.8	7
89	Lead Halide Residue as a Source of Light-Induced Reversible Defects in Hybrid Perovskite Layers and Solar Cells. *ACS Energy Letters*, **2019**, 4, 3011-3017	20.1	29
88	Effects of nanowire size and geometry on silicon nanowire array thin film solar cells. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2018**, 36, 011401	1.3	3
87	Local Photovoltaic Properties of GrapheneSilicon Heterojunctions (Phys. Status Solidi B 12/2018). *Physica Status Solidi (B): Basic Research*, **2018**, 255, 1870144	1.3	

86	Local Photovoltaic Properties of Graphene‐Silicon Heterojunctions. *Physica Status Solidi (B): Basic Research*, **2018**, 255, 1800305	1.3	4
85	Photocurrent Spectroscopy of Perovskite Layers and Solar Cells: A Sensitive Probe of Material Degradation. *Journal of Physical Chemistry Letters*, **2017**, 8, 838-843	6.4	13
84	Direct Imaging of Dopant Distribution in Polycrystalline ZnO Films. *ACS Applied Materials & Interfaces*, **2017**, 9, 7241-7248	9.5	7
83	Photovoltaic characterization of graphene/silicon Schottky junctions from local and macroscopic perspectives. *Chemical Physics Letters*, **2017**, 676, 82-88	2.5	8
82	Ultrathin Nanocrystalline Diamond Films with Silicon Vacancy Color Centers via Seeding by 2 nm Detonation Nanodiamonds. *ACS Applied Materials & Interfaces*, **2017**, 9, 38842-38853	9.5	34
81	NEAR INFRARED PHOTOLUMINESCENCE OF THE HYDROGENATED AMORPHOUS SILICON THIN FILMS WITH IN-SITU EMBEDDED SILICON NANOPARTICLES. *Ceramics - Silikaty*, **2017**, 136-140	0.6	4
80	Passivating electron contact based on highly crystalline nanostructured silicon oxide layers for silicon solar cells. *Solar Energy Materials and Solar Cells*, **2016**, 158, 2-10	6.4	68
79	Experimental quantification of useful and parasitic absorption of light in plasmon-enhanced thin silicon films for solar cells application. *Scientific Reports*, **2016**, 6, 22481	4.9	37
78	Strategies for Doped Nanocrystalline Silicon Integration in Silicon Heterojunction Solar Cells. *IEEE Journal of Photovoltaics*, **2016**, 6, 1132-1140	3.7	42
77	High-yield fabrication and properties of 1.4 nm nanodiamonds with narrow size distribution. *Scientific Reports*, **2016**, 6, 38419	4.9	50
76	Profilometry of thin films on rough substrates by Raman spectroscopy. *Scientific Reports*, **2016**, 6, 37859	4.9	13
75	Phosphate content influence on structural, spectroscopic, and lasing properties of Er,Yb-doped potassium-lanthanum phosphate glasses. *Optical Engineering*, **2016**, 55, 047102	1.1	3
74	Investigating inhomogeneous electronic properties of radial junction solar cells using correlative microscopy. *Japanese Journal of Applied Physics*, **2015**, 54, 08KA08	1.4	7
73	Correlative microscopy of radial junction nanowire solar cells using nanoindent position markers. *Solar Energy Materials and Solar Cells*, **2015**, 135, 106-112	6.4	11
72	Size and Purity Control of HPHT Nanodiamonds down to 1 nm. *Journal of Physical Chemistry C*, **2015**, 119, 27708-27720	3.8	112
71	Organic-inorganic halide perovskite/crystalline silicon four-terminal tandem solar cells. *Physical Chemistry Chemical Physics*, **2015**, 17, 1619-29	3.6	257
70	Raman Spectroscopy of Organic-Inorganic Halide Perovskites. *Journal of Physical Chemistry Letters*, **2015**, 6, 401-6	6.4	182
69	Preparation and testing of silicon nanowires. *Canadian Journal of Physics*, **2014**, 92, 819-821	1.1	1

68	On the effects of hydrogenation of thin film polycrystalline silicon: A key factor to improve heterojunction solar cells. *Solar Energy Materials and Solar Cells*, **2014**, 122, 31-39	6.4	17
67	Photolithography-free interdigitated back-contacted silicon heterojunction solar cells with efficiency >21% **2014**,		4
66	Organic Inorganic Halide Perovskites: Perspectives for Silicon-Based Tandem Solar Cells. *IEEE Journal of Photovoltaics*, **2014**, 4, 1545-1551	3.7	100
65	Microscopically inhomogeneous electronic and material properties arising during thermal and plasma CVD of graphene. *Journal of Materials Chemistry C*, **2014**, 2, 8939-8948	7.1	12
64	Organometallic Halide Perovskites: Sharp Optical Absorption Edge and Its Relation to Photovoltaic Performance. *Journal of Physical Chemistry Letters*, **2014**, 5, 1035-9	6.4	1699
63	Light trapping in thin-film solar cells measured by Raman spectroscopy. *Applied Physics Letters*, **2014**, 105, 111106	3.4	10
62	Microscopic measurements of variations in local (photo)electronic properties in nanostructured solar cells. *Solar Energy Materials and Solar Cells*, **2013**, 119, 228-234	6.4	9
61	Magnetotransport in graphene on silicon side of SiC. *Journal of Physics: Conference Series*, **2013**, 456, 012038	0.3	
60	Characterization of the mechanical properties of qPlus sensors. *Beilstein Journal of Nanotechnology* , **2013**, 4, 1-9	3	21
59	Function of thin film nanocrystalline diamond protein SGFET independent of grain size. *Sensors and Actuators B: Chemical*, **2012**, 166-167, 239-245	8.5	17
58	Comparative study on dry etching of polycrystalline diamond thin films. *Vacuum*, **2012**, 86, 799-802	3.7	18
57	Novel plasma treatment in linear antenna microwave PECVD system. *Vacuum*, **2012**, 86, 603-607	3.7	9
56	Direct growth of sub-micron diamond structures. *Vacuum*, **2012**, 86, 693-695	3.7	9
55	Electrical properties of carbon nanowall films. *Journal of Non-Crystalline Solids*, **2012**, 358, 2548-2551	3.9	9
54	Local photoconductivity of microcrystalline silicon thin films excited by 442nm HeCd laser measured by conductive atomic force microscopy. *Journal of Non-Crystalline Solids*, **2012**, 358, 2082-2085	3.9	4
53	HFCVD growth of various carbon nanostructures on SWCNT paper controlled by surface treatment. *Physica Status Solidi (B): Basic Research*, **2012**, 249, 2399-2403	1.3	12
52	How nanocrystalline diamond films become charged in nanoscale. *Diamond and Related Materials*, **2012**, 24, 39-43	3.5	7
51	Conductive atomic force microscopy on carbon nanowalls. *Journal of Non-Crystalline Solids*, **2012**, 358, 2545-2547	3.9	13

50	Optical characterisation of organosilane-modified nanocrystalline diamond films. *Chemical Papers*, **2011**, 65,	1.9	7
49	Local photoconductivity of microcrystalline silicon thin films measured by conductive atomic force microscopy. *Physica Status Solidi - Rapid Research Letters*, **2011**, 5, 373-375	2.5	21
48	Guided assembly of nanoparticles on electrostatically charged nanocrystalline diamond thin films. *Nanoscale Research Letters*, **2011**, 6, 144	5	11
47	Impact of AFM-induced nano-pits in a-Si:H films on silicon crystal growth. *Nanoscale Research Letters*, **2011**, 6, 145	5	3
46	Synthesis, structure, and opto-electronic properties of organic-based nanoscale heterojunctions. *Nanoscale Research Letters*, **2011**, 6, 238	5	21
45	Effective extraction of photoluminescence from a diamond layer with a photonic crystal. *ACS Nano*, **2011**, 5, 346-50	16.7	24
44	Microscopic Characterizations of Nanostructured Silicon Thin Films for Solar Cells. *Materials Research Society Symposia Proceedings*, **2011**, 1321, 313		
43	Discriminating adenocarcinoma from normal colonic mucosa through deconvolution of Raman spectra. *Journal of Biomedical Optics*, **2011**, 16, 127001	3.5	12
42	Dielectric, magnetic and structural properties of novel multiferroic Eu(0.5)Ba(0.5)TiO(3) ceramics. *Journal of Physics Condensed Matter*, **2011**, 23, 025904	1.8	16
41	The structure and growth mechanism of Si nanoneedles prepared by plasma-enhanced chemical vapor deposition. *Nanotechnology*, **2010**, 21, 415604	3.4	19
40	Assembly of osteoblastic cell micro-arrays on diamond guided by protein pre-adsorption. *Diamond and Related Materials*, **2010**, 19, 153-157	3.5	15
39	Ultrasharp Si nanowires produced by plasma-enhanced chemical vapor deposition. *Physica Status Solidi - Rapid Research Letters*, **2010**, 4, 37-39	2.5	13
38	Relation of nanoscale and macroscopic properties of mixed-phase silicon thin films. *Physica Status Solidi (A) Applications and Materials Science*, **2010**, 207, 582-586	1.6	8
37	Local electrostatic charging differences of sub-100 nm nanocrystalline diamond films. *Physica Status Solidi (A) Applications and Materials Science*, **2010**, 207, 2040-2044	1.6	7
36	Role of the tip induced local anodic oxidation in the conductive atomic force microscopy of mixed phase silicon thin films. *Physica Status Solidi C: Current Topics in Solid State Physics*, **2010**, 7, NA-NA		5
35	Decomposition of Mixed Phase Silicon Raman Spectra. *Materials Research Society Symposia Proceedings*, **2009**, 1153, 1		
34	Creating nanocrystals in amorphous silicon using a conductive tip. *Nanotechnology*, **2009**, 20, 045302	3.4	12
33	Enhancing nanocrystalline diamond surface conductivity by deposition temperature and chemical post-processing. *Physica Status Solidi (A) Applications and Materials Science*, **2009**, 206, 276-280	1.6	15

32	Optoelectronic performance of poly(p-phenylenevinylene)-based heterostructures evaluated by scanning probe techniques. *Physica Status Solidi (B): Basic Research*, **2009**, 246, 2828-2831	1.3	2
31	LiF enhanced nucleation of the low temperature microcrystalline silicon prepared by plasma enhanced chemical vapour deposition. *Thin Solid Films*, **2009**, 517, 6829-6832	2.2	1
30	Simplified procedure for patterned growth of nanocrystalline diamond micro-structures. *Thin Solid Films*, **2009**, 518, 343-347	2.2	15
29	Microcrystalline silicon, grain boundaries and role of oxygen. *Solar Energy Materials and Solar Cells*, **2009**, 93, 1444-1447	6.4	14
28	Illumination-induced charge transfer in polypyrrole□diamond nanosystem. *Diamond and Related Materials*, **2009**, 18, 800-803	3.5	6
27	Seeding of polymer substrates for nanocrystalline diamond film growth. *Diamond and Related Materials*, **2009**, 18, 734-739	3.5	21
26	Photovoltage effects in polypyrrole□diamond nanosystem. *Diamond and Related Materials*, **2009**, 18, 249-252	3.5	28
25	Detecting sp2 phase on diamond surfaces by atomic force microscopy phase imaging and its effects on surface conductivity. *Diamond and Related Materials*, **2009**, 18, 722-725	3.5	27
24	Electrochemical synthesis and electronic properties of polypyrrole on intrinsic diamond. *Diamond and Related Materials*, **2009**, 18, 1098-1101	3.5	15
23	Mapping of mechanical stress in silicon thin films on silicon cantilevers by Raman microspectroscopy. *Journal of Non-Crystalline Solids*, **2008**, 354, 2235-2237	3.9	5
22	Crystallinity of the mixed phase silicon thin films by Raman spectroscopy. *Journal of Non-Crystalline Solids*, **2008**, 354, 2253-2257	3.9	34
21	A simple quality factor for characterization of thin silicon films. *Journal of Non-Crystalline Solids*, **2008**, 354, 2227-2230	3.9	1
20	Properties of thin film silicon, prepared at high growth rate in a wide range of thicknesses. *Journal of Non-Crystalline Solids*, **2008**, 354, 2451-2454	3.9	
19	Spatially localized current-induced crystallization of amorphous silicon films. *Journal of Non-Crystalline Solids*, **2008**, 354, 2305-2309	3.9	9
18	Gold Micrometer Crystals Modified with Carboranethiol Derivatives. *Journal of Physical Chemistry C*, **2008**, 112, 14446-14455	3.8	42
17	Formation of Continuous Nanocrystalline Diamond Layers on Glass and Silicon at Low Temperatures. *Chemical Vapor Deposition*, **2008**, 14, 181-186		68
16	A simple tool for quality evaluation of the microcrystalline silicon prepared at high growth rate. *Thin Solid Films*, **2008**, 516, 4966-4969	2.2	7
15	Correlation of atomic force microscopy detecting local conductivity and micro-Raman spectroscopy on polymer□fullerene composite films. *Physica Status Solidi - Rapid Research Letters*, **2007**, 1, 193-195	2.5	15

14	Controlled growth of nanocrystalline silicon on permalloy micro-patterns. *Applied Physics A: Materials Science and Processing*, **2007**, 88, 797-800	2.6	1
13	Applications of intense ultra-short XUV pulses to solid state physics: time-resolved luminescence spectroscopy and radiation damage studies **2007**,		2
12	Properties of Microcrystalline Silicon Prepared at High Growth Rate **2006**,		1
11	Transport properties of microcrystalline silicon, prepared at high growth rate. *Journal of Non-Crystalline Solids*, **2006**, 352, 1097-1100	3.9	10
10	Characterization of mixed phase silicon by Raman spectroscopy. *Journal of Non-Crystalline Solids*, **2006**, 352, 1209-1212	3.9	43
9	Microcrystalline silicon prepared at magnetic field modified nucleation. *Journal of Non-Crystalline Solids*, **2006**, 352, 901-905	3.9	4
8	Defects generation by hydrogen passivation of polycrystalline silicon thin films. *Solar Energy*, **2006**, 80, 653-657	6.8	11
7	Hydrogenation of polycrystalline silicon thin films. *Thin Solid Films*, **2006**, 501, 144-148	2.2	7
6	Effect of hydrogen passivation on polycrystalline silicon thin films. *Thin Solid Films*, **2005**, 487, 152-156	2.2	27
5	Patterning of hydrogenated microcrystalline silicon growth by magnetic field. *Applied Physics Letters*, **2005**, 87, 011901	3.4	8
4	Thin silicon films deposited at low substrate temperatures studied by surface photovoltage technique. *Thin Solid Films*, **2004**, 451-452, 408-412	2.2	
3	Formation of microcrystalline silicon at low temperatures and role of hydrogen. *Journal of Non-Crystalline Solids*, **2004**, 338-340, 287-290	3.9	7
2	Structure and Properties of Silicon Thin Films Deposited at Low Substrate Temperatures. *Japanese Journal of Applied Physics*, **2003**, 42, L987-L989	1.4	6
1	Silicon thin films deposited at very low substrate temperatures. *Thin Solid Films*, **2003**, 442, 163-166	2.2	4