

# Ondrej Caha

## List of Publications by Year in descending order

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71  
papers

1,248  
citations

516710

16  
h-index

395702

33  
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71  
all docs

71  
docs citations

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times ranked

2171  
citing authors

#	ARTICLE	IF	CITATIONS
1	Large magnetic gap at the Dirac point in Bi <sub>2</sub> Te <sub>3</sub> /MnBi <sub>2</sub> Te <sub>4</sub> heterostructures. Nature, 2019, 576, 423-428.	27.8	189
2	Nonmagnetic band gap at the Dirac point of the magnetic topological insulator (Bi <sub>1-x</sub> Mnx) <sub>2</sub> Se <sub>3</sub> . Nature Communications, 2016, 7, 10559.	12.8	102
3	Magneto-Optical Signature of Massless Kane Electrons in $\text{CdMnTe}$ . Physical Review Letters, 2016, 117, 136401.	7.8	93
4	Growth, Structure, and Electronic Properties of Epitaxial Bismuth Telluride Topological Insulator Films on BaF <sub>2</sub> (111) Substrates. Crystal Growth and Design, 2013, 13, 3365-3373.	3.0	70
5	Mn-Rich MnSb <sub>2</sub> Te <sub>4</sub> : A Topological Insulator with Magnetic Gap Closing at High Curie Temperatures of 45-50 K. Advanced Materials, 2021, 33, e2102935.	21.0	70
6	Giant Rashba Splitting in Pb <sub>1-x</sub> Sn <sub>x</sub> Te (111) Topological Crystalline Insulator Films Controlled by Bi Doping in the Bulk. Advanced Materials, 2017, 29, 1604185.	21.0	44
7	Determination of the energy band gap of Bi <sub>2</sub> Se <sub>3</sub> . Scientific Reports, 2017, 7, 6891.	3.3	41
8	Structure and composition of bismuth telluride topological insulators grown by molecular beam epitaxy. Journal of Applied Crystallography, 2014, 47, 1889-1900.	4.5	36
9	Structural and electronic properties of manganese-doped Bi <sub>2</sub> Te <sub>3</sub> epitaxial layers. New Journal of Physics, 2015, 17, 013028.	2.9	33
10	Bulk polymer nanocomposites with preparation protocol governed nanostructure: the origin and properties of aggregates and polymer bound clusters. Soft Matter, 2018, 14, 2094-2103.	2.7	33
11	Optical characterization of HfO <sub>2</sub> thin films. Thin Solid Films, 2011, 519, 6085-6091.	1.8	32
12	Topological quantum phase transition from mirror to time reversal symmetry protected topological insulator. Nature Communications, 2017, 8, 968.	12.8	31
13	Evaluation of composition, mechanical properties and structure of nc-TiC/a-C:H coatings prepared by balanced magnetron sputtering. Surface and Coatings Technology, 2012, 211, 111-116.	4.8	27
14	Interband absorption edge in the topological insulators $\text{Bi}_2\text{MnTe}$ . Physical Review B, 2017, 96, .	2.2	26
15	Nonuniform carrier density in $\text{CdMnTe}$ evidenced by optical spectroscopy. Physical Review B, 2018, 97, .	2.2	22
16	Evolution of strain across the magnetostructural phase transition in epitaxial FeRh films on different substrates. Physical Review B, 2020, 101, .	3.2	19
17	Raman and interband optical spectra of epitaxial layers of the topological insulators Bi <sub>2</sub> Te <sub>3</sub> and Bi <sub>2</sub> Se <sub>3</sub> on BaF <sub>2</sub> substrates. Physica Scripta, 2014, T162, 014007.	2.5	18
18	On the control of deposition process for enhanced mechanical properties of nc-TiC/a-C:H coatings with DC magnetron sputtering at low or high ion flux. Surface and Coatings Technology, 2014, 255, 8-14.	4.8	18

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19	InGaAs and GaAsSb strain reducing layers covering InAs/GaAs quantum dots. Journal of Crystal Growth, 2010, 312, 1383-1387.	1.5	17
20	Preparation of (001) preferentially oriented titanium thin films by ion-beam sputtering deposition on thermal silicon dioxide. Journal of Materials Science, 2016, 51, 3329-3336.	3.7	17
21	Energy scale of Dirac electrons in Cd <sub>3</sub> As <sub>2</sub> . Physical Review B, 2018, 97, .	3.2	16
22	Morphological Instability in InAs/GaSb Superlattices due to Interfacial Bonds. Physical Review Letters, 2005, 95, 096104.	7.8	14
23	Direct observation of double exchange in ferromagnetic La <sub>0.7</sub> Sr <sub>0.3</sub> CoO <sub>3</sub> by broadband ellipsometry. Physical Review B, 2018, 97, .	3.2	14
24	Effect of strain on the growth of InAs/GaSb superlattices: An x-ray diffraction study. Journal of Applied Physics, 2010, 107, .	2.5	13
25	Complementary information on CdSe/ZnSe quantum dot local structure from extended X-ray absorption fine structure and diffraction anomalous fine structure measurements. Journal of Alloys and Compounds, 2012, 523, 155-160.	5.5	13
26	Fully spin-polarized bulk states in ferroelectric GeTe. Physical Review Research, 2020, 2, .	3.6	13
27	Tribological properties of nc-TiC/a-C:H coatings prepared by magnetron sputtering at low and high ion bombardment of the growing film. Surface and Coatings Technology, 2014, 241, 64-73.	4.8	12
28	Structural and Optical Properties of Luminescent Copper(I) Chloride Thin Films Deposited by Sequentially Pulsed Chemical Vapour Deposition. Coatings, 2018, 8, 369.	2.6	12
29	Structure Inversion Asymmetry and Rashba Effect in Quantum Confined Topological Crystalline Insulator Heterostructures. Advanced Functional Materials, 2021, 31, 2008885.	14.9	12
30	Triple-Point Fermions in Ferroelectric GeTe. Physical Review Letters, 2021, 126, 206403.	7.8	12
31	Preparation of high-quality stress-free (001) aluminum nitride thin film using a dual Kaufman ion-beam source setup. Thin Solid Films, 2019, 670, 105-112.	1.8	11
32	Interdiffusion in Ge rich SiGe/Ge multilayers studied by <i>in situ</i> diffraction. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 1775-1779.	1.8	10
33	Surface morphology and magnetic anisotropy in (Ga,Mn)As. Applied Physics Letters, 2011, 98, 152503.	3.3	10
34	Structural disorder of natural Bi <sub>2</sub> Te <sub>3</sub> superlattices grown by molecular beam epitaxy. Physical Review Materials, 2018, 2, .	2.4	10
35	Studies of influence of high temperature preannealing on oxygen precipitation in CZ Si wafers. Journal of Crystal Growth, 2012, 348, 53-59.	1.5	9
36	Study of the thermal dependence of mechanical properties, chemical composition and structure of nanocomposite TiC/a-C:H coatings. Surface and Coatings Technology, 2014, 242, 62-67.	4.8	9

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37	Landau level spectroscopy of $\text{Bi}_2\text{Se}_3$ thin films. Physical Review B, 2020, 102, .	2.2	7
38	Nonlinear Evolution of Surface Morphology in InAs/AlAs Superlattices via Surface Diffusion. Physical Review Letters, 2006, 96, 136102.	7.8	8
39	Step-edge assisted large scale FeSe monolayer growth on epitaxial $\text{Bi}_2\text{Se}_3$ thin films. New Journal of Physics, 2020, 22, 073050.	2.9	8
40	Signatures of dephasing by mirror-symmetry breaking in weak-antilocalization magnetoresistance across the topological transition in $\text{PbSnSe}_3$ thin films. Physical Review B, 2021, 103, .	3.2	7
41	Development of oxide precipitates in silicon: calculation of the distribution function of the classical theory of nucleation by a nodal-points approximation. Journal of Physics Condensed Matter, 2007, 19, 496202.	1.8	6
42	Density of Mn interstitials in (Ga,Mn)As epitaxial layers determined by anomalous x-ray diffraction. Applied Physics Letters, 2010, 97, .	3.3	6
43	Comparative analysis of thermal stability of two different nc-TiC/a-C:H coatings. Surface and Coatings Technology, 2015, 267, 32-39.	4.8	6
44	Determining the sub-surface damage of CdTe single crystals after lapping. Journal of Materials Science: Materials in Electronics, 2018, 29, 9652-9662.	2.2	6
45	X-ray diffraction on laterally modulated $(\text{InAs})_n(\text{AlAs})_m$ short-period superlattices. Journal of Applied Physics, 2004, 96, 4833-4838.	2.5	5
46	X-ray diffraction on precipitates in Czochralski-grown silicon. Physica B: Condensed Matter, 2009, 404, 4626-4629.	2.7	5
47	Homogenization of CZ Si wafers by Tabula Rasa annealing. Physica B: Condensed Matter, 2009, 404, 4637-4640.	2.7	5
48	Plasma polymer films of tetravinylsilane modified by UV irradiation. Surface and Coatings Technology, 2010, 205, S177-S181.	4.8	5
49	Stress-free deposition of [001] preferentially oriented titanium thin film by Kaufman ion-beam source. Thin Solid Films, 2017, 638, 57-62.	1.8	5
50	Photoinduced insulator-to-metal transition and coherent acoustic phonon propagation in $\text{LaCoO}_3$ thin films explored by femtosecond pump-probe ellipsometry. Physical Review B, 2022, 105, .	3.2	5
51	Nucleation of lateral compositional modulation in InGaP epitaxial films grown on (001) GaAs. Journal of Applied Physics, 2012, 111, 024306.	2.5	4
52	Temperature-dependent far-infrared reflectance of an epitaxial $(\text{BaTiO}_3)_8/(\text{SrTiO}_3)_4$ superlattice. Physical Review B, 2017, 95, .	3.2	4
53	$\text{Mn}_3\text{Ge}$ -based tetragonal Heusler alloy thin films with addition of Ni, Pt, and Pd. Journal of Physics Condensed Matter, 2020, 32, 145801.	1.8	4
54	Analysis of vacancy and interstitial nucleation kinetics in Si wafers during rapid thermal annealing. Journal of Physics Condensed Matter, 2009, 21, 105402.	1.8	3

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55	Enhanced permeability dielectric FeCo/Al <sub>2</sub> O <sub>3</sub> multilayer thin films with tailored properties deposited by magnetron sputtering on silicon. <i>AIP Advances</i> , 2019, 9, 035243.	1.3	3
56	Spontaneous lateral modulation in short-period superlattices investigated by grazing-incidence x-ray diffraction. <i>Physical Review B</i> , 2005, 72, .	3.2	2
57	InAs/GaAs quantum dot capping in kinetically limited MOVPE growth regime. <i>Journal of Crystal Growth</i> , 2011, 317, 39-42.	1.5	2
58	Study of oxide precipitates in silicon using X-ray diffraction techniques. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2011, 208, 2587-2590.	1.8	2
59	Effect of Hydrogen on the Properties of Amorphous Carbon Nitride Films. <i>Advanced Materials Research</i> , 0, 383-390, 3298-3304.	0.3	2
60	Humidity resistant hydrogenated carbon nitride films. <i>Applied Surface Science</i> , 2013, 275, 7-13.	6.1	2
61	Mid-infrared ellipsometry, Raman and X-ray diffraction studies of Al Ga <sub>1-x</sub> N/AlN/Si structures. <i>Applied Surface Science</i> , 2017, 421, 859-865.	6.1	2
62	Annealing Behavior with Thickness Hindered Nucleation in Small-Molecule Organic Semiconductor Thin Films. <i>Crystal Growth and Design</i> , 2019, 19, 3777-3784.	3.0	2
63	Vacancies and Self-Interstitials Dynamics in Silicon Wafers. <i>Solid State Phenomena</i> , 2009, 156-158, 139-144.	0.3	1
64	Lattice constants and optical response of pseudomorph Si-rich SiGe:B. <i>Applied Physics Letters</i> , 2013, 103, 202107.	3.3	1
65	Tuning of SPR for Colocalized Characterization of Biomolecules Using Nanoparticle-Containing Multilayers. <i>Plasmonics</i> , 2021, 16, 1203-1211.	3.4	1
66	Homogeneous and Heterogeneous Nucleation of Oxygen in Si-CZ. <i>Solid State Phenomena</i> , 0, 178-179, 495-500.	0.3	0
67	Oxygen Precipitation Studied by X-Ray Diffraction Techniques. <i>Solid State Phenomena</i> , 0, 178-179, 325-330.	0.3	0
68	Precipitation in silicon wafers after high temperature preanneal studied by X-ray diffraction methods. <i>Physica B: Condensed Matter</i> , 2012, 407, 3002-3005.	2.7	0
69	Reprint of "Study of the thermal dependence of mechanical properties, chemical composition and structure of nanocomposite TiC/a-C:H coatings". <i>Surface and Coatings Technology</i> , 2014, 255, 158-163.	4.8	0
70	Cyclotron resonance of Kane electrons observed in Cd <sub>3</sub> As <sub>2</sub> . , 2017, , .		0
71	Controlling the Metamagnetic Phase Transition in FeRh/MnRh Superlattices and Thin-Film Fe <sub>50-x</sub> Mn <sub>x</sub> Rh <sub>50</sub> Alloys. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 3568-3579.	8.0	0