

Filip Kadlec

List of Publications by Year in descending order

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140
times ranked

2635
citing authors

#	ARTICLE	IF	CITATIONS
1	Onset of a superconductor-insulator transition in an ultrathin NbN film under in-plane magnetic field studied by terahertz spectroscopy. Physical Review B, 2022, 105, .	1.1	3
2	Fingerprints of Critical Phenomena in a Quantum Paraelectric Ensemble of Nanoconfined Water Molecules. Nano Letters, 2022, 22, 3380-3384.	4.5	8
3	Unusual features of lattice dynamics in lawsonite near its phase transitions. Scientific Reports, 2022, 12, 6157.	1.6	1
4	Effects of Grain Boundaries on THz Conductivity in the Crystalline States of Ge ₂ Sb ₂ Te ₅ Phase-Change Materials: Correlation with DC Loss. Physica Status Solidi - Rapid Research Letters, 2021, 15, 2000411.	1.2	4
5	Lead-substituted barium hexaferrite for tunable terahertz optoelectronics. NPG Asia Materials, 2021, 13, .	3.8	7
6	Seemingly anisotropic magnetodielectric effect in isotropic EuTiO_3 ceramics. Physical Review B, 2020, 102, .	1.1	8
7	Structural and spectroscopic properties of the polar antiferromagnets NiTeO_6 and NiTe_2O_7 . Physical Review B, 2019, 100, .	1.1	9
8	Dielectric and conducting properties of unintentionally and Sn-doped In^{2+} -Ga ₂ O ₃ studied by terahertz spectroscopy. Journal of Applied Physics, 2020, 127, .	1.1	13
9	Anisotropic magnetodielectric effect in isotropic EuTiO_3 ceramics. , 2020, , .		0
10	Spin and lattice dynamics of multiferroic $\text{SrMn}_7\text{O}_{12}$ studied by THz and infrared spectroscopies at low temperatures and in magnetic field. , 2019, , .		0
11	Terahertz pulse emission from epitaxial n-InAs in a magnetic field. Journal Physics D: Applied Physics, 2019, 52, 365301.	1.3	6
12	Changes in spin and lattice dynamics induced by magnetic and structural phase transitions in multiferroic $\text{SrMn}_7\text{O}_{12}$. Physical Review B, 2019, 99, .		
13	Magnetolectric Excitations in Polar Antiferromagnetic Nickel Tellurates Substituted by Mn and Co. , 2019, , .		0
14	Electromagnon in the Y-type hexaferrite BaSrCoZnFe_{12} . Physical Review B, 2018, 97, .	1.1	25
15	Electric-field tuning of a planar terahertz metamaterial based on strained SrTiO_3 layers. Journal Physics D: Applied Physics, 2018, 51, 054001.	1.3	7
16	Structural and spectroscopic properties of the polar antiferromagnet MnTeO_6 . Physical Review B, 2018, 97, .	1.1	11
17	Vibrational spectra of multiferroics with Y- and Z-type hexaferrite structures. Ferroelectrics, 2018, 532, 208-220.	0.3	7
18	Experimental Gouy phase shift compensation in Terahertz time-domain spectroscopy. Photonics and Nanostructures - Fundamentals and Applications, 2018, 31, 129-133.	1.0	8

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19	Unusual ferroelectric and magnetic phases in multiferroic CaMn_2O_7 ceramics. <i>Physical Review B</i> , 2017, 95.	1.1	15
20	Magnetolectric excitations in multiferroic $\text{CaMn}_7\text{O}_{12}$. <i>Physical Review B</i> , 2017, 95, .	1.1	15
21	Terahertz dynamics of nanoconfined water molecules. , 2016, , .		0
22	THz spectroscopic investigations of magnetodielectric coupling in $\text{Sr}_{0.55}\text{Ba}_{0.45}\text{MnO}_3$ ceramics. , 2016, , .		0
23	Bulk magnetic terahertz metamaterials based on dielectric microspheres. , 2016, , .		0
24	Spectroscopic studies of the ferroelectric and magnetic phase transitions in multiferroic $\text{Sr}_{1-x}\text{Ba}_x\text{MnO}_3$. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 175901.	0.7	11
25	Electromagnon in the hexaferrite Zn_2O . <i>Physical Review B</i> , 2016, 94, .	1.1	23
26	Incipient ferroelectricity of water molecules confined to nano-channels of beryl. <i>Nature Communications</i> , 2016, 7, 12842.	5.8	65
27	Spin and lattice excitations of a BiFeO_3 film and ceramics. <i>Physical Review B</i> , 2015, 91, .		0
28	Broadband spectroscopy of H_2O molecule confined in nano-cages of crystal lattice: Low-energy dynamics and incipient ferroelectric behavior. , 2015, , .		0
29	Spin and lattice excitations of multiferroic $(\text{Ba}_{0.2}\text{Sr}_{0.8})\text{Mn}_3\text{Co}_2\text{Fe}_{24}\text{O}_{41}$ in the THz range. , 2015, , .		0
30	Electric-field tunable THz metamaterials based on strained SrTiO_3 films. , 2014, , .		0
31	Far-infrared electrodynamics of thin superconducting NbN film in magnetic fields. <i>Superconductor Science and Technology</i> , 2014, 27, 055009.	1.8	14
32	Spin and lattice vibrations of $\text{CaMn}_7\text{O}_{12}$ in the THz range. , 2014, , .		0
33	Transition between metamaterial and photonic-crystal behavior in arrays of dielectric rods. <i>Optics Express</i> , 2014, 22, 30492.	1.7	15
34	Possible coupling between magnons and phonons in multiferroic $\text{CaMn}_7\text{O}_{12}$. <i>Physical Review B</i> , 2014, 90, .	1.1	18
35	THz-IR spectroscopy of single H_2O molecules confined in nanocage of beryl crystal lattice. <i>Phase Transitions</i> , 2014, 87, 966-972.	0.6	10
36	Origin of non-drude conductivity in the THz spectra of nanogranular semiconductors. , 2014, , .		0

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37	<p> $\text{Fe}^{2+}\text{O}^{3-}$ </p> <p>nanograin ceramics. Physical</p>	1.1	13
38	Terahertz and direct current losses and the origin of non-Drude terahertz conductivity in the crystalline states of phase change materials. Journal of Applied Physics, 2013, 114, 233105.	1.1	10
39	Terahertz sensing of supercooled glycerol using a 1D photonic crystal. , 2013, , .		0
40	Resonant terahertz response of TiO_2 microspheres. Proceedings of SPIE, 2013, , .	0.8	0
41	Ultrafast carrier response of Br^+ -irradiated $\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ excited at telecommunication wavelengths. Journal of Applied Physics, 2012, 111, 093721.	1.1	5
42	TiO_2 microsphere-based metamaterials exhibiting effective magnetic response in the terahertz regime. Applied Physics A: Materials Science and Processing, 2012, 109, 891-894.	1.1	8
43	TiO_2 microspheres metamaterials with negative permeability in the terahertz bandwidth. , 2012, , .		0
44	Resonant magnetic response of TiO_2 microspheres at terahertz frequencies. Applied Physics Letters, 2012, 100, 061117.	1.5	48
45	Contrast in terahertz conductivity of phase-change materials. Solid State Communications, 2012, 152, 852-855.	0.9	35
46	Electric field induced tuning of the dielectric properties of strontium titanate bulk crystals in terahertz frequency range. , 2011, , .		0
47	Study of the ferroelectric phase transition in GeTe using time-domain THz spectroscopy. , 2011, , .		1
48	Terahertz spectroscopy with focused beams: Gouy shift correction for highly accurate refractive index retrieval. , 2011, , .		0
49	Investigation of metamaterials for terahertz frequency range. , 2011, , .		0
50	Tunable THz metamaterials based on an array of paraelectric SrTiO_3 rods. Applied Physics A: Materials Science and Processing, 2011, 103, 689-692.	1.1	21
51	Study of the ferroelectric phase transition in germanium telluride using time-domain terahertz spectroscopy. Physical Review B, 2011, 84, .	1.1	31
52	Tuning of dielectric properties of SrTiO_3 in the terahertz range. Physical Review B, 2011, 84, .	1.1	24
53	Ultrafast terahertz photoconductivity in nanocrystalline mesoporous TiO_2 films. Applied Physics Letters, 2010, 96, 062103.	1.5	20
54	Broadband dielectric response and grain-size effect in $\text{K}_{0.5}\text{Na}_{0.5}\text{NbO}_3$ ceramics. Journal of Applied Physics, 2010, 107, .	1.1	58

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55	Effect of Fe doping on the terahertz conductivity of GaN single crystals. Journal Physics D: Applied Physics, 2010, 43, 145401.	1.3	6
56	Gouy shift correction for highly accurate refractive index retrieval in time-domain terahertz spectroscopy. Optics Express, 2010, 18, 15338.	1.7	91
57	Fishnet metamaterials on thin polymer film for terahertz applications. , 2010, , .		0
58	Near-field terahertz imaging of ferroelectric domains in barium titanate. Phase Transitions, 2010, 83, 985-993.	0.6	2
59	Near-field terahertz imaging of ferroelectric domains in barium titanate. , 2010, , .		0
60	Temperature and electric field tuning of the ferroelectric soft mode in a strained SrTiO_3 Physical Review B, 2009, 80, .	1.1	48
61	Ultrafast carrier dynamics in microcrystalline silicon probed by time-resolved terahertz spectroscopy. Physical Review B, 2009, 79, .	1.1	77
62	High tunability of the soft mode in strained $\text{SrTiO}_3/\text{DyScO}_3$ multilayers. Journal of Physics Condensed Matter, 2009, 21, 115902.	0.7	42
63	Study of responsiveness of near-field terahertz imaging probes. Journal Physics D: Applied Physics, 2009, 42, 155501.	1.3	11
64	High photocarrier mobility in ultrafast ion-irradiated $\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$ for terahertz applications. Journal Physics D: Applied Physics, 2009, 42, 195103.	1.3	20
65	Tunable terahertz metamaterials with negative permeability. Physical Review B, 2009, 79, .	1.1	99
66	Broadband dielectric terahertz metamaterials with negative permeability. Optics Letters, 2009, 34, 3541.	1.7	38
67	Ultrafast carrier dynamics in microcrystalline silicon studied by time-resolved terahertz spectroscopy. , 2009, , .		0
68	Tunable metamaterials with negative permeability in THz range. , 2009, , .		0
69	Dielectric Tunable Metamaterials with Negative Permeability in Terahertz Range. , 2009, , .		0
70	Tunable structures and modulators for THz light. Comptes Rendus Physique, 2008, 9, 197-214.	0.3	96
71	Assessing skin hydration status in haemodialysis patients using terahertz spectroscopy: a pilot/feasibility study. Physics in Medicine and Biology, 2008, 53, 7063-7071.	1.6	8
72	Materials with on-demand refractive indices in the terahertz range. Optics Letters, 2008, 33, 2275.	1.7	26

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73	Determination of the influence of dialysis on the human skin water content by means of THz spectroscopy. , 2008, , .		0
74	Modulators of THz radiation based on SrTiO ₃ epitaxial thin films. , 2008, , .		0
75	Ultrafast carrier dynamics in Br^{InP} studied by time-resolved terahertz spectroscopy. Physical Review B, 2008, 78, .		48
76	Tunable SrTiO ₃ /DyScO ₃ heterostructures for applications in the terahertz range. , 2008, , .		0
77	Study of responsiveness of near-field terahertz imaging probes. Proceedings of SPIE, 2008, , .	0.8	0
78	Field-induced soft mode hardening in SrTiO ₃ /DyScO ₃ multilayers. Applied Physics Letters, 2008, 93, .	1.5	20
79	Broadband microwave-to-terahertz near-field imaging. IEEE MTT-S International Microwave Symposium Digest IEEE MTT-S International Microwave Symposium, 2007, , .	0.0	4
80	Propagation of terahertz pulses in photoexcited media: Analytical theory for layered systems. Journal of Chemical Physics, 2007, 127, 024506.	1.2	51
81	Optically controllable photonic crystals used as THz modulators. , 2007, , .		0
82	Ultrafast opto-THz modulators based on photonic crystals with GaAs defect. , 2007, , .		0
83	Terahertz near-field spectroscopy and microscopy based on metal-dielectric antenna. , 2007, , .		0
84	Optically tunable photonic crystals used as devices for the THz range. , 2007, , .		0
85	An Optically Controlled Modulator of Terahertz Radiation Based on 1-D Photonic Crystal. , 2007, , .		0
86	Ultrafast opto-terahertz photonic crystal modulator. Optics Letters, 2007, 32, 680.	1.7	101
87	Fast one-dimensional photonic crystal modulators for the terahertz range. Optics Express, 2007, 15, 8898.	1.7	48
88	Tunable materials and structures for the THz range. , 2007, , .		0
89	Highly tunable SrTiO ₃ •DyScO ₃ heterostructures for applications in the terahertz range. Applied Physics Letters, 2007, 91, .	1.5	56
90	Microwave and Terahertz Surface Resistance of MgB ₂ Thin Films. Journal of Superconductivity and Novel Magnetism, 2007, 19, 617-623.	0.8	4

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91	Microwave dielectric relaxation in cubic bismuth based pyrochlores containing titanium. Journal of Applied Physics, 2006, 100, 014105.	1.1	37
92	Carrier dynamics in microcrystalline silicon studied by time-resolved terahertz spectroscopy. Journal of Non-Crystalline Solids, 2006, 352, 2846-2849.	1.5	8
93	<title>Optical rectification at metal surfaces investigated in the terahertz frequency range</title>. , 2006, 6257, 179.		1
94	Independent determination of the complex refractive index and wave impedance by time-domain terahertz spectroscopy. Optics Communications, 2006, 260, 175-183.	1.0	29
95	Correlation between infrared, THz and microwave dielectric properties of vanadium doped antiferroelectric BiNbO4. Journal of the European Ceramic Society, 2006, 26, 2861-2865.	2.8	15
96	Dielectric tunability of SrTiO3 thin films in the terahertz range. Applied Physics Letters, 2006, 88, 102901.	1.5	70
97	THz Near-Field Spectroscopy Based on Metal-Dielectric Antennae. , 2006, , .		3
98	Electric field tuning of the dielectric response of strontium titanate in the THz range. , 2006, , .		0
99	Simultaneous Determination of Dielectric Permittivity and Magnetic Permeability of Bulk Samples by THz Time-Domain Spectroscopy. , 2006, , .		0
100	Microwave and infrared dielectric response of monoclinic bismuth zinc niobate based pyrochlore ceramics with ion substitution in A site. Journal of Applied Physics, 2006, 100, 034109.	1.1	32
101	Photoionization Mechanisms of Atmospheric Gases Probed by Terahertz Pulses. , 2006, , .		0
102	Simple device for continuous angle-of-incidence selection in ultrafast experiments. Review of Scientific Instruments, 2005, 76, 043101.	0.6	2
103	Ultrafast far-infrared dynamics probed by terahertz pulses: A frequency-domain approach. II. Applications. Journal of Chemical Physics, 2005, 122, 104504.	1.2	27
104	Terahertz surface impedance of epitaxial MgB2 thin film. Applied Physics Letters, 2005, 87, 092503.	1.5	20
105	Ultrafast far-infrared dynamics probed by terahertz pulses: A frequency domain approach. I. Model systems. Journal of Chemical Physics, 2005, 122, 104503.	1.2	25
106	Nonresonant ionization of oxygen molecules by femtosecond pulses: Plasma dynamics studied by time-resolved terahertz spectroscopy. Journal of Chemical Physics, 2005, 123, 104310.	1.2	32
107	A metal-dielectric antenna for terahertz near-field imaging. Journal of Applied Physics, 2005, 98, 014910.	1.1	63
108	Study of terahertz radiation generated by optical rectification on thin gold films. Optics Letters, 2005, 30, 1402.	1.7	99

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109	Active optical control of the terahertz reflectivity of high-resistivity semiconductors. Optics Letters, 2005, 30, 1992.	1.7	27
110	An interconnected 2D-TM EBG structure for millimeter and submillimeter waves. IEEE Journal on Selected Areas in Communications, 2005, 23, 1378-1384.	9.7	7
111	High-temperature phase transitions in SrBi ₂ Ta ₂ O ₉ film: a study by THz spectroscopy. Journal of Physics Condensed Matter, 2004, 16, 6763-6769.	0.7	10
112	Time-Domain Terahertz Spectroscopy of SrBi ₂ Ta ₂ O ₉ . Ferroelectrics, 2004, 300, 125-129.	0.3	6
113	Optical two-photon absorption in GaAs measured by optical-pump terahertz-probe spectroscopy. Physical Review B, 2004, 70, .	1.1	38
114	Optical pump-terahertz probe spectroscopy of dyes in solutions: Probing the dynamics of liquid solvent or solid precipitate?. Journal of Chemical Physics, 2004, 120, 912-917.	1.2	9
115	Optical rectification at metal surfaces. Optics Letters, 2004, 29, 2674.	1.7	125
116	Composition dependence of the lattice vibrations in Sr _{n+1} Ti _n O _{3n+1} Ruddlesden-Popper homologous series. Journal of the European Ceramic Society, 2003, 23, 2639-2645.	2.8	55
117	Phase-sensitive time-domain terahertz reflection spectroscopy. Review of Scientific Instruments, 2003, 74, 4711-4717.	0.6	100
118	Methodology of an optical pump-terahertz probe experiment: An analytical frequency-domain approach. Journal of Chemical Physics, 2002, 117, 8454-8466.	1.2	65
119	High-temperature infrared reflectivity of yttria-stabilized hafnia single crystals. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2000, 72, 56-58.	1.7	9
120	Vibrational spectroscopy of Ba _{1-x} R _x F _{2+x} (R = La, Nd) superionic conductors. Ferroelectrics, 2000, 239, 47-54.	0.3	0
121	Defects and lattice distortions in the superionic conductor Ba _{0.84} La _{0.16} F _{2.16} . Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1999, 57, 234-240.	1.7	9
122	Inelastic neutron scattering study of the superionic solid solutions Ba _{1-x} La _x F _{2+x} . Solid State Ionics, 1999, 119, 131-137.	1.3	9
123	Vibrational spectra of superionic crystals (BaF ₂) _{1-x} (LaF ₃) _x . Journal of Physics and Chemistry of Solids, 1999, 60, 861-866.	1.9	11
124	Title is missing!. Journal of Materials Science, 1998, 33, 969-975.	1.7	32
125	Quantitative Infrared and Sub-millimetre Spectroscopy of Dielectric Single Crystals, Ceramics and Thin Films. , 1997, , 305-306.		0
126	Dynamics of the glass and superionic phase transitions in Cs ₅ H ₃ (SO ₄) ₄ ·H ₂ O protonic conductor. Ferroelectrics, 1996, 176, 179-201.	0.3	13

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127	Dynamics of the proton transport in the Cs ₅ H ₃ (SO ₄) ₄ · xH ₂ O superionic conductor (PCHS). <i>Ionics</i> , 1996, 2, 235-240.	1.2	1
128	Disappearance of the infrared soft mode in the weak ferroelectric Li ₂ Ge ₇ O ₁₅ . <i>Solid State Communications</i> , 1995, 94, 725-729.	0.9	13
129	Infrared and Raman spectroscopy of Li ₂ Ge ₇ O ₁₅ single crystals: spectra of the paraelectric and aristotype phases. <i>Journal of Physics Condensed Matter</i> , 1995, 7, 5681-5700.	0.7	4
130	Photon-assisted ultrafast plasma expansion in GaAs. , 0, , .		0
131	Phase-sensitive time-domain terahertz reflectometry. , 0, , .		0
132	Optical two-photon absorption in GaAs measured by optical pump-terahertz probe spectroscopy. , 0, , .		1
133	Active optical control of reflectivity in the terahertz range. , 0, , .		0
134	Optical rectification at metal surfaces. , 0, , .		74
135	Terahertz radiation generated by optical rectification at metal surfaces. , 0, , .		0
136	A novel broadband probe for near-field imaging and spectroscopy from DC to THz. , 0, , .		0
137	Far-infrared dynamics probed by terahertz pulses. , 0, , .		0
138	Photoionization mechanisms of oxygen probed by terahertz pulses. , 0, , .		0