

# FÃ©lix E FernÃ¡ndez

## List of Publications by Year in descending order

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82  
papers

1,655  
citations

304743

22  
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302126

39  
g-index

88  
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88  
docs citations

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times ranked

1824  
citing authors

#	ARTICLE	IF	CITATIONS
1	Raman spectra and elastic light scattering dynamics of V <sub>3</sub> O <sub>5</sub> across insulator–metal transition. Journal of Applied Physics, 2021, 129, 025111.	2.5	3
2	Photoinduced dynamics of V <sub>4</sub> O <sub>7</sub> . , 2021, , .		0
3	Large non-thermal contribution to picosecond strain pulse generation using the photo-induced phase transition in VO <sub>2</sub> . Nature Communications, 2020, 11, 1690.	12.8	23
4	Photoelasticity of $\text{VO}_{2.4}$ nanolayers in insulating and metallic phases studied by picosecond ultrasonics. Physical Review Materials, 2020, 4, .		
5	Ultrafast Insulator-Metal Transition in VO <sub>2</sub> Nanostructures Assisted by Picosecond Strain Pulses. Physical Review Applied, 2019, 11, .	3.8	12
6	Photoinduced surface dynamics of V <sub>3</sub> O <sub>5</sub> : visualization of autocorrelation function from light scattering data. , 2019, , .		0
7	Toward reproducible metal-insulator transition characteristics in V <sub>2</sub> O <sub>3</sub> thin films sputter-deposited on glass. Journal of Applied Physics, 2018, 124, .	2.5	12
8	Photoinduced surface plasmon switching at VO <sub>2</sub> /Au interface. Optics Express, 2018, 26, 13773.	3.4	15
9	Parallel GPU computing in light scattering metrology of ultrafast surface dynamics. , 2018, , .		0
10	Time-resolved light scattering by photoexcited V <sub>2</sub> O <sub>3</sub> . MRS Advances, 2017, 2, 1231-1236.	0.9	2
11	Maximizing the performance of photothermal actuators by combining smart materials with supplementary advantages. Science Advances, 2017, 3, e1602697.	10.3	82
12	Ultrafast Excited-State Dynamics of $\text{VO}_{3.8}$ as a Signature of a Photoinduced Insulator-Metal Phase Transition. Physical Review Letters, 2017, 119, 057602.		
13	Ultrafast structural dynamics of $\text{VO}_{3.2}$ Physical Review B, 2017, 96, .		
14	Metal-insulator transition and nonlinear optical response of sputter-deposited V <sub>3</sub> O <sub>5</sub> thin films. Journal of Applied Physics, 2017, 121, .	2.5	15
15	Ultrafast diffraction conoscopy of the structural phase transition in VO <sub>2</sub> : Evidence of two lattice distortions. Physical Review B, 2017, 95, .	3.2	8
16	Photoinduced optical dynamics of phase-change vanadium oxides. , 2017, , .		1
17	Super-resolution in diffractive imaging from hemispherical elastic light scattering data. Optics Letters, 2017, 42, 2263.	3.3	6
18	Ultrafast Light Scattering by Transient Inhomogeneities in Vanadium Dioxide. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
19	Effects of Strain in Mesoscale VO <sub>2</sub> Grains on Light-Induced Insulator-Metal Transition. , 2016, , .	0	
20	Semiconductor-insulator transition in VO <sub>2</sub> (B) thin films grown by pulsed laser deposition. Journal of Applied Physics, 2015, 118, .	2.5	13
21	Light scattering by epitaxial VO <sub>2</sub> films near the metal-insulator transition point. Journal of Applied Physics, 2015, 117, 184304.	2.5	10
22	Increasing Efficiency, Speed, and Responsivity of Vanadium Dioxide Based Photothermally Driven Actuators Using Single-Wall Carbon Nanotube Thin-Films. ACS Nano, 2015, 9, 4371-4378.	14.6	69
23	Photoinduced insulator-to-metal transition and surface statistics of VO <sub>2</sub> monitored by elastic light scattering. Applied Optics, 2015, 54, 2141.	1.8	16
24	Ultrafast light scattering imaging of multi-scale transition dynamics in vanadium dioxide. Journal of Applied Physics, 2013, 114, .	2.5	16
25	Phase transition behavior in microcantilevers coated with M1-phase VO <sub>2</sub> and M2-phase VO <sub>2</sub> :Cr thin films. Journal of Applied Physics, 2012, 111, .	2.5	63
26	Dynamics of VO<sub>2</sub>:Cr coated microcantilevers in aqueous media. , 2012, , .	0	
27	A micro-mechanical resonator with programmable frequency capability. Smart Materials and Structures, 2012, 21, 035007.	3.5	16
28	Photothermal actuation of V O<sub>2</sub>:Cr-coated microcantilevers in air and aqueous media. Smart Materials and Structures, 2012, 21, 105009.	3.5	29
29	A multiple-state micro-mechanical programmable memory. Microelectronic Engineering, 2011, 88, 3231-3234.	2.4	13
30	Supersaturation-Driven Optical Tuning of Ag Nanocomposite Glasses for Photonics: An In Situ Optical Microspectroscopy Study. Plasmonics, 2011, 6, 399-405.	3.4	30
31	Size-dependent phase transition of V O <sub>2</sub> nanostructures induced by light excitation. Physics Procedia, 2011, 13, 18-23.	1.2	4
32	Dynamics of photothermally driven VO <sub>2</sub> -coated microcantilevers. Journal of Applied Physics, 2011, 110, .	2.5	34
33	Frequency Tuning of \$hbox{VO}_{2}\$ -Coated Buckled Microbridges. Journal of Microelectromechanical Systems, 2011, 20, 558-560.	2.5	8
34	Bending in VO <sub>2</sub> -coated microcantilevers suitable for thermally activated actuators. Journal of Applied Physics, 2010, 107, .	2.5	96
35	The effect of growth conditions and N <sub>2</sub> /O <sub>2</sub> ambient on LO-phonon replicas during epitaxial growth of ZnO on c-sapphire. Journal of Materials Science, 2010, 45, 6009-6017.	3.7	1
36	Optoelectronic and all-optical multiple memory states in vanadium dioxide. Journal of Applied Physics, 2010, 108, .	2.5	91

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37	Nanostructured VO <sub>2</sub> film coatings for tunable MEMS resonators. , 2010, , .	2	
38	Study of the resonant frequencies of silicon microcantilevers coated with vanadium dioxide films during the insulator-to-metal transition. Journal of Applied Physics, 2010, 107, 053528.	2.5	18
39	Critical behavior and size effects in light-induced transition of nanostructured $\text{VO}_2$ Physical Review B, 2010, 82, .	3.2	44
40	Resonant Frequency Behavior of Silicon Cantilevers Coated With Nanostructured and Microcrystalline VO <sub>2</sub> Films. IEEE Nanotechnology Magazine, 2010, 9, 330-334.	2.0	3
41	Optical nonlinearity and structural dynamics of VO <sub>2</sub> films. Journal of Applied Physics, 2009, 105, .	2.5	36
42	Young's modulus of pulsed-laser deposited V <sub>6</sub> O <sub>13</sub> thin films. Journal of Applied Physics, 2009, 105, .	2.5	14
43	Electrical properties of VO <sub>2</sub> thin films grown by PLD. , 2008, , .	0	
44	Young's modulus of VO <sub>2</sub> thin films as a function of temperature including insulator-to-metal transition regime. Applied Physics Letters, 2008, 92, .	3.3	43
45	Insulator-to-metal phase transition and recovery processes in VO <sub>2</sub> . Physical Review B, 2007, 76, .	3.2	89
46	Photoinduced insulator-to-metal phase transition in VO <sub>2</sub> crystalline films and model of dielectric susceptibility. Physical Review B, 2007, 75, .	3.2	64
47	Charge transfer model of metal-insulator phase transition and ultrafast optical response in VO <sub>2</sub> . Optical Materials, 2007, 29, 1385-1389.	3.6	4
48	Light-induced ultrafast phase transitions in VO <sub>2</sub> thin film. Applied Surface Science, 2006, 252, 5512-5515.	6.1	105
49	The model of ultrafast light-induced insulator-metal phase transition in VO <sub>2</sub> . Solid State Communications, 2006, 137, 615-620.	1.9	30
50	Insulator-to-metal phase transformation of VO <sub>2</sub> films upon femtosecond laser excitation. Journal of Electronic Materials, 2006, 35, 1866-1872.	2.2	12
51	Ultrafast optical dynamics in VO <sub>2</sub> . , 2006, , .	3	
52	Azimuth Dependence of Light-Induced Ultrafast Insulator-to-Metal Phase Transition in VO <sub>2</sub> Thin Film. ECS Transactions, 2006, 3, 37-49.	0.5	2
53	The model of ultrafast light-induced insulator-metal phase transition in vanadium oxide. Journal of Physics: Conference Series, 2005, 21, 44-49.	0.4	5
54	The model of metal-insulator phase transition in vanadium oxide. Physics Letters, Section A: General, Atomic and Solid State Physics, 2005, 343, 446-453.	2.1	24

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55	Novel pulsed-laser-deposition VO <sub>2</sub> thin films for ultrafast applications. Journal of Electronic Materials, 2005, 34, 491-496.	2.2	19
56	Photoinduced Solid Phase Transformation in Vanadium Dioxide Films. Materials Research Society Symposia Proceedings, 2005, 905, 1.	0.1	1
57	Nonlinear Optical Dynamics During Phase Transition in Vanadium Dioxide. Materials Research Society Symposia Proceedings, 2005, 888, 1.	0.1	0
58	Semiconductor-to-metallic phase transition of VO <sub>2</sub> by laser excitation. Journal of Electronic Materials, 2004, 33, 1171-1175.	2.2	9
59	Host excitation-induced red emission from Pr <sup>3+</sup> in strontium barium niobate thin film. Journal of Luminescence, 2004, 108, 37-41.	3.1	14
60	Excited state dynamics and semiconductor-to-metallic phase transition of VO <sub>2</sub> thin film. Journal of Luminescence, 2004, 108, 233-238.	3.1	26
61	Effects of compositional phase transitions on luminescence of Sr <sub>1-x</sub> CaxTiO <sub>3</sub> :Pr <sup>3+</sup> . Solid State Communications, 2003, 126, 153-157.	1.9	77
62	Energy transfer from the host to Eu <sup>3+</sup> in ZnO. Optical Materials, 2003, 23, 27-32.	3.6	85
63	Optical property of Eu in strontium barium niobate optical thin film grown by pulsed laser deposition. Thin Solid Films, 2003, 424, 61-65.	1.8	8
64	Structure, Morphology, and Properties of Strontium Barium Niobate Thin Films Grown by Pulsed Laser Deposition. Integrated Ferroelectrics, 2002, 42, 219-233.	0.7	7
65	Microwave Properties of Strontium Barium Niobate Thin Films Grown by Pulsed Laser Deposition. Materials Research Society Symposia Proceedings, 2001, 688, 1.	0.1	1
66	Photoluminescence of Ce <sup>3+</sup> ,Tb <sup>3+</sup> :Y <sub>2</sub> O <sub>3</sub> nanoclusters embedded in SiO <sub>2</sub> sol-gel glasses. Materials Science and Engineering C, 2001, 16, 55-58.	7.3	32
67	Nitride thin films grown by pulsed laser deposition assisted by atomic nitrogen beam. Thin Solid Films, 2000, 377-378, 781-787.	1.8	10
68	Molecular-beam epitaxy growth and nitrogen doping of ZnSe <sub>1-x</sub> Tex alloys grown on InP substrates. Applied Physics Letters, 1999, 75, 2608-2610.	3.3	28
69	Gamma-ray spectral analysis with the COSPAJ continuum fitting routine. Applied Radiation and Isotopes, 1998, 49, 1235-1240.	1.5	8
70	<title>Transient grating in KNbO<formula><roman>3</roman></formula>/KTaO<formula><roman>3</roman></formula></title>, 1998, 3425, 182.	0	
71	Excitation dynamics of cerium in niobate crystals. Journal of Alloys and Compounds, 1997, 250, 360-363.	5.5	1
72	Tantalum Oxide and Niobium Oxide thin Films Grown by Pulsed Laser Deposition. Materials Research Society Symposia Proceedings, 1995, 397, 205.	0.1	1

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73	Up-converted energy transfer from Er <sup>3+</sup> to Cr <sup>3+</sup> in LiNbO <sub>3</sub> single crystal fibers. <i>Journal of Luminescence</i> , 1995, 66-67, 228-231.	3.1	5
74	Enhancement of thickness uniformity of thin films grown by pulsed laser deposition. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1995, 13, 421-427.	2.1	2
75	Generation of submicron monodisperse aerosols in electrosprays. <i>Journal of Aerosol Science</i> , 1990, 21, S673-S676.	3.8	84
76	A beamline for layered synthetic microstructure studies. <i>Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment</i> , 1988, 266, 351-355.	1.6	0
77	Properties of multilayers for soft X-ray optics. <i>Superlattices and Microstructures</i> , 1988, 4, 51-53.	3.1	2
78	Multilayers for soft X-ray optics. <i>IEEE Journal of Quantum Electronics</i> , 1988, 24, 1758-1762.	1.9	1
79	Characterization of multilayers for extended ultraviolet optics. <i>Applied Physics Letters</i> , 1987, 51, 880-882.	3.3	12
80	Sputter Deposited Multilayer V-UV Mirrors. <i>Proceedings of SPIE</i> , 1985, , .	0.8	5
81	Photonuclear sum rules from continuum calculations and their dependence on the residual interaction. <i>Lettere Al Nuovo Cimento Rivista Internazionale Della SocietÃ Italiana Di Fisica</i> , 1979, 26, 388-392.	0.4	0
82	Light-Induced Functional VO<sub>x</sub>2<sub>y</sub> Films. <i>Advanced Materials Research</i> , 0, 47-50, 532-535.	0.3	0