

Cristian Neipp

List of Publications by Citations

Source: <https://exaly.com/author-pdf/7816534/cristian-neipp-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

127
papers

1,884
citations

23
h-index

37
g-index

161
ext. papers

2,252
ext. citations

2.5
avg, IF

4.2
L-index

#	Paper	IF	Citations
127	Large and small deflections of a cantilever beam. <i>European Journal of Physics</i> , 2002 , 23, 371-379	0.8	147
126	Analytical approximations for the period of a nonlinear pendulum. <i>European Journal of Physics</i> , 2006 , 27, 539-551	0.8	79
125	Application of a modified He's homotopy perturbation method to obtain higher-order approximations of an x1/3 force nonlinear oscillator. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2007 , 371, 421-426	2.3	78
124	Application of the harmonic balance method to a nonlinear oscillator typified by a mass attached to a stretched wire. <i>Journal of Sound and Vibration</i> , 2007 , 302, 1018-1029	3.9	75
123	Temporal analysis of grating formation in photopolymer using the nonlocal polymerization-driven diffusion model. <i>Optics Express</i> , 2005 , 13, 6990-7004	3.3	75
122	Holographic photopolymer materials: nonlocal polymerization-driven diffusion under nonideal kinetic conditions. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2005 , 22, 407	1.7	69
121	Optimization of a 1 mm thick PVA/acrylamide recording material to obtain holographic memories: method of preparation and holographic properties. <i>Applied Physics B: Lasers and Optics</i> , 2003 , 76, 851-857 ¹⁹	1.9	64
120	Application of the homotopy perturbation method to the nonlinear pendulum. <i>European Journal of Physics</i> , 2007 , 28, 93-104	0.8	63
119	Application of He's homotopy perturbation method to conservative truly nonlinear oscillators. <i>Chaos, Solitons and Fractals</i> , 2008 , 37, 770-780	9.3	61
118	Physical and effective optical thickness of holographic diffraction gratings recorded in photopolymers. <i>Optics Express</i> , 2005 , 13, 1939-47	3.3	51
117	Exact solution for the nonlinear pendulum. <i>Revista Brasileira De Ensino De Fisica</i> , 2007 , 29, 645-648	0.4	47
116	Angular responses of the first and second diffracted orders in transmission diffraction grating recorded on photopolymer material. <i>Optics Express</i> , 2003 , 11, 1835-43	3.3	40
115	3 Dimensional analysis of holographic photopolymers based memories. <i>Optics Express</i> , 2005 , 13, 3543-57 ₃	3.3	36
114	First-harmonic diffusion-based model applied to a polyvinyl-alcohol-acrylamide-based photopolymer. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2003 , 20, 2052	1.7	36
113	Overmodulation effects in volume holograms recorded on photopolymers. <i>Optics Communications</i> , 2003 , 215, 263-269	2	31
112	Holographic characteristics of a 1-mm-thick photopolymer to be used in holographic memories. <i>Applied Optics</i> , 2003 , 42, 7008-12	1.7	31
111	Higher accuracy analytical approximations to a nonlinear oscillator with discontinuity by He's homotopy perturbation method. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2008 , 372, 2010-2016	2.3	29

110	Characterization of a PVA/acrylamide photopolymer. Influence of a cross-linking monomer in the final characteristics of the hologram. <i>Optics Communications</i> , 2003 , 224, 27-34	2	29
109	Edge-enhanced imaging with polyvinyl alcohol/acrylamide photopolymer gratings. <i>Optics Letters</i> , 2003 , 28, 1510-2	3	26
108	3-dimensional characterization of thick grating formation in PVA/AA based photopolymer. <i>Optics Express</i> , 2006 , 14, 5121-8	3.3	25
107	Direct analysis of monomer diffusion times in polyvinyl/acrylamide materials. <i>Applied Physics Letters</i> , 2008 , 92, 073306	3.4	24
106	Effect of a depth attenuated refractive index profile in the angular responses of the efficiency of higher orders in volume gratings recorded in a PVA/acrylamide photopolymer. <i>Optics Communications</i> , 2004 , 233, 311-322	2	23
105	Numerical and Experimental Analysis of Large Deflections of Cantilever Beams Under a Combined Load. <i>Physica Scripta</i> , 2005 , 61	2.6	23
104	Temporal response and first order volume changes during grating formation in photopolymers. <i>Journal of Applied Physics</i> , 2006 , 99, 113105	2.5	21
103	Temporal evolution of the angular response of a holographic diffraction grating in PVA/acrylamide photopolymer. <i>Optics Express</i> , 2003 , 11, 181-90	3.3	21
102	Approximate solutions of a nonlinear oscillator typified as a mass attached to a stretched elastic wire by the homotopy perturbation method. <i>Chaos, Solitons and Fractals</i> , 2009 , 39, 746-764	9.3	19
101	Educational Software for Interference and Optical Diffraction Analysis in Fresnel and Fraunhofer Regions Based on MATLAB GUIs and the FDTD Method. <i>IEEE Transactions on Education</i> , 2012 , 55, 118-125 ^{2.1}		18
100	Experimental evidence of mixed gratings with a phase difference between the phase and amplitude grating in volume holograms. <i>Optics Express</i> , 2002 , 10, 1374-83	3.3	18
99	Biophotopol: A Sustainable Photopolymer for Holographic Data Storage Applications. <i>Materials</i> , 2012 , 5, 772-783	3.5	17
98	Higher-order approximate solutions to the relativistic and Duffing-harmonic oscillators by modified He's homotopy methods. <i>Physica Scripta</i> , 2008 , 77, 025004	2.6	16
97	Real-time interferometric characterization of a polyvinyl alcohol based photopolymer at the zero spatial frequency limit. <i>Applied Optics</i> , 2007 , 46, 7506-12	1.7	16
96	High-efficiency volume holograms recording on acrylamide and N,N'-methylene-bis-acrylamide photopolymer with pulsed laser. <i>Journal of Modern Optics</i> , 2005 , 52, 1575-1584	1.1	16
95	Theoretical and experimental analysis of overmodulation effects in volume holograms recorded on BB-640 emulsions. <i>Journal of Optics</i> , 2001 , 3, 504-513		16
94	High-efficiency silver-halide sensitized gelatin holograms with low absorption and scatter. <i>Journal of Modern Optics</i> , 1998 , 45, 1985-1992	1.1	16
93	Analysis of monomer diffusion in depth in photopolymer materials. <i>Optics Communications</i> , 2007 , 274, 43-49	2	15

92	Silver halide sensitized gelatin derived from BB-640 holographic emulsion. <i>Applied Optics</i> , 1999 , 38, 1348-56	4.7	15
91	Holographic waveguides in photopolymers. <i>Optics Express</i> , 2019 , 27, 827-840	3.3	15
90	Solution of the relativistic (an)harmonic oscillator using the harmonic balance method. <i>Journal of Sound and Vibration</i> , 2008 , 311, 1447-1456	3.9	14
89	Characterization of polyvinyl alcohol/acrylamide holographic memories with a first-harmonic diffusion model. <i>Applied Optics</i> , 2005 , 44, 6205-10	1.7	14
88	Two diffusion photopolymer for sharp diffractive optical elements recording. <i>Optics Letters</i> , 2015 , 40, 3221-4	3	13
87	Analysis of PVA/AA based photopolymers at the zero spatial frequency limit using interferometric methods. <i>Applied Optics</i> , 2008 , 47, 2557-63	1.7	13
86	Comments on Investigation of the properties of the period for the nonlinear oscillator $x\ddot{+}(1+x^2)x=0$. <i>Journal of Sound and Vibration</i> , 2007 , 303, 925-930	3.9	13
85	Birefringence of cello tape: Jones representation and experimental analysis. <i>European Journal of Physics</i> , 2010 , 31, 551-561	0.8	12
84	Asymptotic representations of the period for the nonlinear oscillator. <i>Journal of Sound and Vibration</i> , 2007 , 299, 403-408	3.9	12
83	Stabilization of volume gratings recorded in polyvinyl alcohol-acrylamide photopolymers with diffraction efficiencies higher than 90%. <i>Journal of Modern Optics</i> , 2004 , 51, 491-503	1.1	12
82	Non-local polymerization driven diffusion based model: general dependence of the polymerization rate to the exposure intensity. <i>Optics Express</i> , 2003 , 11, 1876-86	3.3	12
81	Holographic Characteristics of an Acrylamide/Bisacrylamide Photopolymer in 40 μ m Thick Layers. <i>Physica Scripta</i> , 2005 , 66	2.6	12
80	Mixed phase-amplitude holographic gratings recorded in bleached silver halide materials. <i>Journal Physics D: Applied Physics</i> , 2002 , 35, 957-967	3	12
79	Holographic Lenses in an Environment-Friendly Photopolymer. <i>Polymers</i> , 2018 , 10,	4.5	11
78	Volume Holograms in Photopolymers: Comparison between Analytical and Rigorous Theories. <i>Materials</i> , 2012 , 5, 1373-1388	3.5	11
77	Rigorous interference and diffraction analysis of diffractive optic elements using the finite-difference time-domain method. <i>Computer Physics Communications</i> , 2010 , 181, 1963-1973	4.2	11
76	Optimization of Photopolymer Materials for the Fabrication of a Holographic Waveguide. <i>Polymers</i> , 2017 , 9,	4.5	10
75	Performance analysis of the FDTD method applied to holographic volume gratings: Multi-core CPU versus GPU computing. <i>Computer Physics Communications</i> , 2013 , 184, 469-479	4.2	10

74	Accurate control of a liquid-crystal display to produce a homogenized Fourier transform for holographic memories. <i>Optics Letters</i> , 2007 , 32, 2511-3	3	10
73	Optimization of a fixation-free rehalogenating bleach for BB-640 holographic emulsion. <i>Journal of Modern Optics</i> , 2000 , 47, 1671-1679	1.1	10
72	Dimensional changes in slanted diffraction gratings recorded in photopolymers. <i>Optical Materials Express</i> , 2016 , 6, 3455	2.6	10
71	Acceleration of split-field finite difference time-domain method for anisotropic media by means of graphics processing unit computing. <i>Optical Engineering</i> , 2013 , 53, 011005	1.1	9
70	Improved maximum uniformity and capacity of multiple holograms recorded in absorbent photopolymers. <i>Optics Express</i> , 2007 , 15, 9308-19	3.3	9
69	Diffusion-based model to predict the conservation of gratings recorded in poly(vinyl alcohol)-acrylamide photopolymer. <i>Applied Optics</i> , 2003 , 42, 5839-45	1.7	9
68	An analysis of the classical Doppler effect. <i>European Journal of Physics</i> , 2003 , 24, 497-505	0.8	9
67	Silver halide sensitized gelatin holograms in Slavich PFG-01 red-sensitive emulsion. <i>Journal of Modern Optics</i> , 1999 , 46, 1913-1925	1.1	9
66	Linear response deviations during recording of diffraction gratings in photopolymers. <i>Optics Express</i> , 2009 , 17, 13193-201	3.3	8
65	Analysis of multiplexed holograms stored in a thick PVA/AA photopolymer. <i>Optics Communications</i> , 2008 , 281, 1480-1485	2	8
64	Determination of the refractive index and thickness of holographic silver halide materials by use of polarized reflectances. <i>Applied Optics</i> , 2002 , 41, 6802-8	1.7	8
63	The influence of the development in silver halide sensitized gelatin holograms derived from PFG-01 plates. <i>Optics Communications</i> , 2000 , 173, 161-167	2	8
62	SPLIT-FIELD FINITE-DIFFERENCE TIME-DOMAIN SCHEME FOR KERR-TYPE NONLINEAR PERIODIC MEDIA. <i>Progress in Electromagnetics Research</i> , 2013 , 134, 559-579	3.8	7
61	Holographic photopolymer materials with nonlocal and nonlinear response 2003 , 5216, 127		7
60	Fixation-free bleached silver halide transmission holograms recorded on Slavich PFG-01 red sensitive plates. <i>Journal of Modern Optics</i> , 2001 , 48, 1643-1655	1.1	7
59	Multi-GPU and multi-CPU accelerated FDTD scheme for vibroacoustic applications. <i>Computer Physics Communications</i> , 2015 , 191, 43-51	4.2	6
58	ANALYSIS OF REFLECTION GRATINGS BY MEANS OF A MATRIX METHOD APPROACH. <i>Progress in Electromagnetics Research</i> , 2011 , 118, 167-183	3.8	6
57	Comparison of simplified theories in the analysis of the diffraction efficiency in surface-relief gratings 2012 ,		6

56	Pyromethene dye and non-redox initiator system in a hydrophilic binder photopolymer. <i>Optical Materials</i> , 2007 , 30, 227-230	3.3	6
55	Stabilization of volume gratings recorded in polyvinyl alcohol-acrylamide photopolymers with diffraction efficiencies higher than 90%. <i>Journal of Modern Optics</i> , 2004 , 51, 491-503	1.1	6
54	Analysis of Second and Third Diffracted Orders in Volume Diffraction Gratings Recorded on Photopolymers. <i>Physica Scripta</i> , 2005 , 58	2.6	6
53	Effects of overmodulation in fixation-free rehalogenating bleached holograms. <i>Applied Optics</i> , 2001 , 40, 3402-8	1.7	6
52	Split-field finite-difference time-domain method for second-harmonic generation in two-dimensionally periodic structures. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2015 , 32, 664	1.7	5
51	Performance analysis of SSE and AVX instructions in multi-core CPUs and GPU computing on FDTD scheme for solid and fluid vibration problems. <i>Journal of Supercomputing</i> , 2014 , 70, 514-526	2.5	5
50	Development of a unified FDTD-FEM library for electromagnetic analysis with CPU and GPU computing. <i>Journal of Supercomputing</i> , 2013 , 64, 28-37	2.5	5
49	An experiment in heat conduction using hollow cylinders. <i>European Journal of Physics</i> , 2011 , 32, 1065-1075	3.8	5
48	Effect of the incorporation of N,N'-methylene-bis-acrylamide on the multiplexing of holograms in a hydrophilic acrylamide photopolymer. <i>Optics Communications</i> , 2006 , 268, 133-137	2	5
47	Fixation-free rehalogenating bleached reflection holograms recorded on BB-640 plates. <i>Optics Communications</i> , 2000 , 182, 107-114	2	5
46	Analysis of the Imaging Characteristics of Holographic Waveguides Recorded in Photopolymers. <i>Polymers</i> , 2020 , 12,	4.5	5
45	Simplified physical modeling of parallel-aligned liquid crystal devices at highly non-linear tilt angle profiles. <i>Optics Express</i> , 2018 , 26, 12723-12741	3.3	4
44	Model of low spatial frequency diffractive elements recorded in photopolymers during and after recording. <i>Optical Materials</i> , 2014 , 38, 46-52	3.3	4
43	Analysis of holographic reflection gratings recorded in polyvinyl alcohol/acrylamide photopolymer. <i>Applied Optics</i> , 2013 , 52, 1581-90	1.7	4
42	Analysis of periodic anisotropic media by means of split-field FDTD method and GPU computing 2012 ,		4
41	Improved spatial frequency response in silver halide sensitized gelatin holograms. <i>Optics Communications</i> , 1998 , 155, 241-244	2	4
40	Thick phase holographic gratings recorded on BB-640 and PFG-01 silver halide materials. <i>Journal of Optics</i> , 2003 , 5, S183-S188		4
39	An Integrated Project for Teaching the Post-Buckling of a Slender Cantilever Bar. <i>International Journal of Mechanical Engineering Education</i> , 2004 , 32, 78-92	0.6	4

38	Influence of the fringe visibility on the characteristics of holograms recorded in photopolymer material. <i>Optik</i> , 2003 , 114, 401-406	2.5	4
37	Analytical modeling of blazed gratings on two-dimensional pixelated liquid crystal on silicon devices. <i>Optical Engineering</i> , 2020 , 59, 1	1.1	4
36	Accuracy analysis of simplified and rigorous numerical methods applied to binary nanopatterning gratings in non-paraxial domain. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2013 , 377, 2245-2250	2.3	3
35	Analysis and elimination of boundary reflections in transmission holograms. <i>Optics and Laser Technology</i> , 1998 , 30, 555-560	4.2	3
34	Post-Buckling of a Cantilever Column: A More Accurate Linear Analysis of a Classical Nonlinear Problem. <i>International Journal of Mechanical Engineering Education</i> , 2007 , 35, 293-304	0.6	3
33	Clarifications to the paper "Holographic characteristics of a 1-mm-thick photopolymer to be used in holographic memories". <i>Applied Optics</i> , 2005 , 44, 1448	1.7	3
32	Complex Diffractive Optical Elements Stored in Photopolymers. <i>Polymers</i> , 2019 , 11,	4.5	3
31	Numerical Analysis of H-PDLC Using the Split-Field Finite-Difference Time-Domain Method. <i>Polymers</i> , 2018 , 10,	4.5	3
30	Influence of the set-up on the recording of diffractive optical elements into photopolymers 2014 ,		2
29	Zero Spatial Frequency Limit: Method to Characterize Photopolymers as Optical Recording Material. <i>Research Letters in Physics</i> , 2012 , 2012, 1-9		2
28	Comparison between a thin matrix decomposition method and the rigorous coupled wave theory applied to volume diffraction gratings. <i>Optik</i> , 2003 , 114, 529-534	2.5	2
27	Temporal and non-ideal behavior in photopolymers 2005 ,		2
26	Maximum effective optical thickness of the gratings recorded in photopolymers 2005 ,		2
25	Bleached silver halide volume holograms recorded on Slavich PFG-01 emulsion: The influence of the developer. <i>Journal of Modern Optics</i> , 2001 , 48, 1479-1494	1.1	2
24	Mechanism of hologram formation in fixation-free rehalogenating bleaching processes. <i>Applied Optics</i> , 2002 , 41, 4092-103	1.7	2
23	Efficient split field FDTD analysis of third-order nonlinear materials in two-dimensionally periodic media 2016 ,		1
22	Beta value coupled wave theory for nonslanted reflection gratings. <i>Scientific World Journal, The</i> , 2014 , 2014, 513734	2.2	1
21	Analysis of the diffraction efficiency of reflection and transmission holographic gratings by means of a parallel FDTD approach 2011 ,		1

20	Comparison of photopolymers for optical data storage applications and relief diffractive optical elements recorded onto photopolymers 2011 ,		1
19	Performance improvement of high-thickness photopolymers for holographic data storage applications 2011 ,		1
18	Grating matrix method to describe a volume transmission diffraction grating. <i>Optics Communications</i> , 2006 , 266, 122-128	2	1
17	Three approaches to calculating the velocity profile of a laminar incompressible fluid flow in a hollow tube. <i>American Journal of Physics</i> , 2003 , 71, 46-48	0.7	1
16	Optimization of a PVA/acrylamide material for the recording of multiple diffraction gratings 2004 ,		1
15	High-efficiency volume holograms recording on acrylamide and N,N'methylene-bis-acrylamide photopolymer with pulsed laser 2004 ,		1
14	Comment on Application of Fresnel diffraction to nondestructive measurement of the refractive index of optical fibers <i>Optical Engineering</i> , 2020 , 59, 1	1.1	1
13	Accurate, Efficient and Rigorous Numerical Analysis of 3D H-PDLC Gratings. <i>Materials</i> , 2020 , 13,	3.5	1
12	Analysis of amplitude and phase coupling in volume holography 2006 , 6252, 338		
11	Effect of the glass substrate on the efficiency of the different orders that propagate in a transmission sinusoidal diffraction grating. <i>Journal of Modern Optics</i> , 2006 , 53, 1403-1410	1.1	
10	Examination of the temporal and kinetic effects in acrylamide based photopolymer using the nonlocal polymer driven diffusion model (NPDD) 2006 , 6252, 51		
9	3-dimensional analysis of holographic memories based on photopolymers using finite differences method 2006 , 6187, 307		
8	Comparative study of bleaches applied to BB-640 plates. <i>Journal of Optics</i> , 2004 , 6, 71-76		
7	Thin and thick diffraction gratings: Thin matrix decomposition method. <i>Optik</i> , 2004 , 115, 385-392	2.5	
6	Depth attenuated refractive index profiles in holographic gratings recorded in photopolymer materials 2004 , 5456, 449		
5	Space-variant image processing with volume holography 2004 , 5456, 315		
4	Optimization of fixation-free rehalogenating bleach for BB-640 holographic plates 2000 , 4149, 91		
3	Silver halide volume holograms on BB-640 plates: The influence of the developer in rehalogenating bleach techniques. <i>Optik</i> , 2001 , 112, 349-357	2.5	

- 2 Validation of Fresnel-Kirchhoff Integral Method for the Study of Volume Dielectric Bodies. *Applied Sciences (Switzerland)*, **2021**, 11, 3800 2.6
- 1 Polarimetric analysis of cross-talk phenomena induced by the pixelation in PA-LCoS devices. *Optics and Laser Technology*, **2022**, 152, 108125 4.2