

David Mendlovic

List of Publications by Year in descending order

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142
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73
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143
all docs

143
docs citations

143
times ranked

2135
citing authors

#	ARTICLE	IF	CITATIONS
1	Face Authentication From Grayscale Coded Light Field. , 2020, , .		1
2	Pentagraph image fusion scheme for motion blur prevention using multiple monochromatic images. Applied Optics, 2016, 55, 3096.	2.1	1
3	Multi-dimensional hyperspectral imaging system. , 2015, , .		1
4	Blurred and noisy image pairs in parallel optics. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2014, 31, 2529.	0.8	2
5	Sequential filtering for color image acquisition. Optics Express, 2014, 22, 26878.	1.7	11
6	Toward a super imaging system [Invited]. Applied Optics, 2013, 52, 561.	0.9	9
7	Experimental results for improving the matrix condition using a hybrid optical system. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2012, 29, 331.	0.8	0
8	Deblurring Space-Variant Blur by Adding Noisy Image. Lecture Notes in Computer Science, 2012, , 157-168.	1.0	4
9	Trajectories by a blurred auxiliary system. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2011, 28, 1796.	0.8	3
10	Trajectories in parallel optics. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2011, 28, 2014.	0.8	3
11	Improvement of matrix condition of Hybrid, space variant optics by the means of Parallel Optics design. Optics Express, 2009, 17, 11673.	1.7	9
12	Passive and temporally continuous optical spectral analyzer of RF signals via wavelength coding. Optics Communications, 2008, 281, 1087-1092.	1.0	1
13	Experimental measurement of quality factor enhancement using slow light modes in one dimensional photonic crystal. Optics Express, 2008, 16, 5585.	1.7	24
14	Measurements of Slow Light Effects in Silicon Photonics Resonators Based on 1D Photonic Crystal. , 2007, , .		0
15	Highly dispersive micro-ring resonator based on one dimensional photonic crystal waveguide design and analysis. Optics Express, 2007, 15, 3156.	1.7	52
16	New design method for one-dimensional photonic crystal reflectors in strip waveguides. , 2006, , .		1
17	Highly Dispersive Micro-Ring Resonator Based on 1D Photonic Crystal $\hat{\lambda}_z$ Design and Analysis. , 2006, , .		0
18	Passive and periodically ultra fast RF-photonics spectral scanner. Optics Express, 2006, 14, 8367.	1.7	5

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19	Radio frequency photonic filter for highly resolved and ultrafast information extraction. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2005, 22, 1668.	0.8	10
20	Analysis of waveguide-splitter-junction in high-index Silicon-On-Insulator waveguides. Optics Express, 2005, 13, 2931.	1.7	5
21	Variable optical attenuation functionality for laser welding, laser range finder, and lidar applications. , 2004, , .		1
22	Thin element approximation for the analysis of blazed gratings: simplified model and validity limits. Optics Communications, 2004, 229, 11-21.	1.0	31
23	Super resolving optical system based on spectral dilation. Optics Communications, 2004, 241, 43-50.	1.0	9
24	Realization of temporal linear transformations by the use of a spatial-diffraction-based optical system. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2004, 21, 732.	0.8	1
25	Superresolution by use of code division multiplexing. Applied Optics, 2003, 42, 1451.	2.1	12
26	Optical transfer function shaping and depth of focus by using a phase only filter. Applied Optics, 2003, 42, 1925.	2.1	9
27	Dynamic sub-wavelength encryption. , 2003, , .		0
28	Ultrafast all-optical switching. Journal of Optical Networking, 2002, 1, 170.	2.5	10
29	Using Fourier/Mellin-based correlators and their fractional versions in navigational tasks. Pattern Recognition, 2002, 35, 2993-2999.	5.1	25
30	Improved superresolution in coherent optical systems. Applied Optics, 2001, 40, 4688.	2.1	3
31	On-axis computer-generated holograms based on centrosymmetric partitioning of the pixel. Applied Optics, 2001, 40, 5928.	2.1	4
32	Optical implementation of second-order nonlinear Volterra operators with use of triple correlation. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2001, 18, 164.	0.8	2
33	Superresolution optical system using three fixed generalized gratings: experimental results. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2001, 18, 514.	0.8	17
34	<title>From computer-generated holograms toward partially coherent optical signal processors</title>. , 2001, , .		0
35	Light efficient imaging with improved resolving ability. Optics Communications, 2001, 190, 69-77.	1.0	1
36	Improved acoustic signals discrimination using fractional Fourier transform based phase-space representations. Optics Communications, 2001, 190, 95-101.	1.0	9

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37	The optimal system for sub-wavelength point source localization. Optics Communications, 2001, 198, 311-315.	1.0	4
38	IV Optical systems with improved resolving power. Progress in Optics, 2000, 40, 271-341.	0.4	23
39	Pulse amplitude modulation masks for incoherent super resolution. Optics Communications, 2000, 177, 149-155.	1.0	2
40	A new optical random coding technique for security systems. Optics Communications, 2000, 180, 15-20.	1.0	15
41	Wigner-related phase spaces for signal processing and their optical implementation. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2000, 17, 2339.	0.8	3
42	Understanding superresolution in Wigner space. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2000, 17, 2422.	0.8	31
43	Superresolution optical system with two fixed generalized Damman gratings. Applied Optics, 2000, 39, 5318.	2.1	13
44	Optimal synthesis of three-dimensional complex amplitude distributions. Optics Letters, 2000, 25, 363.	1.7	11
45	Introduction to the Fractional Fourier Transform and Its Applications. Advances in Imaging and Electron Physics, 1999, 106, 239-291.	0.1	98
46	Super resolution optical systems for objects with finite sizes. Optics Communications, 1999, 163, 79-85.	1.0	28
47	Coherence waves. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1999, 16, 359.	0.8	7
48	Synthesis of hybrid spatial coherence. Applied Optics, 1999, 38, 4279.	2.1	6
49	Superresolving optical system with time multiplexing and computer decoding. Applied Optics, 1999, 38, 7245.	2.1	70
50	Synthesis of spatial coherence. Optics Letters, 1999, 24, 361.	1.7	25
51	<title>Novel system for obtaining real-time 3D position superresolved estimation of point targets</title>. , 1999, , .		0
52	Diffraction limited domain flat-top generator. Optics Communications, 1998, 145, 237-248.	1.0	20
53	Experimental considerations and scaling property of the fractional Fourier transform. Optics Communications, 1998, 146, 55-61.	1.0	8
54	The ABCD-Bessel transformation. Optics Communications, 1998, 147, 39-41.	1.0	12

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55	Fourier optics of the triple correlation. <i>Optics Communications</i> , 1998, 152, 243-246.	1.0	1
56	On-axis phase-only computer-generated holograms based on a minimal etching process. <i>Journal of Modern Optics</i> , 1998, 45, 1437-1449.	0.6	1
57	Three-dimensional sensing by using a lenslet, a Dammann grating, and a combination. <i>Applied Optics</i> , 1998, 37, 125.	2.1	0
58	Optical implementations of two-dimensional fractional Fourier transforms and linear canonical transforms with arbitrary parameters. <i>Applied Optics</i> , 1998, 37, 2130.	2.1	72
59	Modifications of detour phase computer-generated holograms. <i>Applied Optics</i> , 1998, 37, 3044.	2.1	4
60	Generalized Wigner function for the analysis of superresolution systems. <i>Applied Optics</i> , 1998, 37, 4374.	2.1	16
61	High-frequency enhancement by an optical system for superresolution of temporally restricted objects. <i>Optics Letters</i> , 1998, 23, 801.	1.7	17
62	Display of spatial coherence. <i>Optics Letters</i> , 1998, 23, 1084.	1.7	28
63	Fractional triple correlation and its applications. <i>Journal of the Optical Society of America A: Optics and Image Science, and Vision</i> , 1998, 15, 1658.	0.8	3
64	IV: Fractional Transformations in Optics. <i>Progress in Optics</i> , 1998, 38, 263-342.	0.4	60
65	Talbot (1836), Montgomery (1967), Lau (1948) and Wolf (1955) on periodicity in optics. <i>Journal of Optics</i> , 1998, 7, 1121-1124.	0.5	5
66	Light propagation analysis in graded index fiber—review and applications. <i>Fiber and Integrated Optics</i> , 1997, 16, 55-61.	1.7	3
67	Computation considerations and fast algorithms for calculating the diffraction integral. <i>Journal of Modern Optics</i> , 1997, 44, 407-414.	0.6	107
68	Optical transfer function design by use of a phase-only coherent transfer function. <i>Applied Optics</i> , 1997, 36, 1027.	2.1	9
69	Invariant pattern recognition by use of wavelength multiplexing. <i>Applied Optics</i> , 1997, 36, 1059.	2.1	7
70	Localized, partially space-invariant filtering. <i>Applied Optics</i> , 1997, 36, 1086.	2.1	7
71	One-dimensional superresolution optical system for temporally restricted objects. <i>Applied Optics</i> , 1997, 36, 2353.	2.1	44
72	Fractional correlator with real-time control of the space-invariance property. <i>Applied Optics</i> , 1997, 36, 2370.	2.1	10

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73	Fractional wavelet transform. Applied Optics, 1997, 36, 4801.	2.1	111
74	Two-dimensional superresolution optical system for temporally restricted objects. Applied Optics, 1997, 36, 6687.	2.1	32
75	Fractional joint transform correlator. Applied Optics, 1997, 36, 7402.	2.1	22
76	Encoding technique for design of zero-order (on-axis) Fraunhofer computer-generated holograms. Applied Optics, 1997, 36, 8427.	2.1	28
77	Wavelength-multiplexing system for single-mode image transmission. Applied Optics, 1997, 36, 8474.	2.1	29
78	Optoelectronic implementation of the triple correlation. Optics Letters, 1997, 22, 1018.	1.7	5
79	Space-bandwidth product adaptation and its application to superresolution: fundamentals. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1997, 14, 558.	0.8	89
80	Space-bandwidth product adaptation and its application to superresolution: examples. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1997, 14, 563.	0.8	59
81	Design of dynamically adjustable anamorphic fractional Fourier transformer. Optics Communications, 1997, 136, 52-60.	1.0	35
82	Invariant pattern recognition based on 1-D Wavelet functions and the polynomial decomposition. Optics Communications, 1997, 136, 306-312.	1.0	0
83	The use of Ewald's surfaces in triple correlation optics. Optics Communications, 1997, 144, 170-172.	1.0	4
84	Compact all-optical bypass exchange switch. Applied Optics, 1996, 35, 248.	2.1	18
85	Fractional correlation operation: performance analysis. Applied Optics, 1996, 35, 297.	2.1	22
86	Every Fourier optical system is equivalent to consecutive fractional-Fourier-domain filtering. Applied Optics, 1996, 35, 3167.	2.1	13
87	Double-multiplexed computer-generated holograms. Applied Optics, 1996, 35, 3887.	2.1	4
88	Optical illustration of a varied fractional Fourier-transform order and the Radon-Wigner display. Applied Optics, 1996, 35, 3925.	2.1	33
89	Fractional Wiener filter. Applied Optics, 1996, 35, 3930.	2.1	50
90	Space-variant simultaneous detection of several objects by the use of multiple anamorphic fractional-Fourier-transform filters. Applied Optics, 1996, 35, 3945.	2.1	27

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91	Fractional Radon transform: definition. Applied Optics, 1996, 35, 4628.	2.1	16
92	Single-channel polychromatic pattern recognition by the use of a joint-transform correlator. Applied Optics, 1996, 35, 6382.	2.1	11
93	High-efficiency arbitrary array generator. Applied Optics, 1996, 35, 6875.	2.1	10
94	Two-dimensional wavelet transform by wavelength multiplexing. Applied Optics, 1996, 35, 7019.	2.1	11
95	Fractional Hilbert transform. Optics Letters, 1996, 21, 281.	1.7	188
96	Gerchbergâ€™Saxton algorithm applied in the fractional Fourier or the Fresnel domain. Optics Letters, 1996, 21, 842.	1.7	229
97	Spaceâ€™bandwidth product of optical signals and systems. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1996, 13, 470.	0.8	310
98	Propagation of mutual intensity expressed in terms of the fractional Fourier transform. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1996, 13, 1068.	0.8	24
99	<title>Optical implementation of the 2D Radon-Wigner transform</title>. , 1996, , .		0
100	Synthesis of pattern recognition filters for fractional Fourier processing. Optics Communications, 1996, 128, 199-204.	1.0	45
101	Some important fractional transformations for signal processing. Optics Communications, 1996, 125, 18-20.	1.0	61
102	Synthesis of mutual intensity distributions using the fractional Fourier transform. Optics Communications, 1996, 125, 288-301.	1.0	31
103	Signal spatial-filtering using the localized fractional Fourier transform. Optics Communications, 1996, 126, 14-18.	1.0	26
104	Two-channel computer-generated hologram and its application for optical correlation. Optics Communications, 1995, 116, 322-325.	1.0	14
105	Optical implementation of the two-dimensional fractional Fourier transform with different orders in the two dimensions. Optics Communications, 1995, 120, 134-138.	1.0	66
106	Fractional Fourier optics. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1995, 12, 743.	0.8	236
107	New signal representation based on the fractional Fourier transform: definitions. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1995, 12, 2424.	0.8	50
108	Fractional correlation. Applied Optics, 1995, 34, 303.	2.1	133

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109	Composite harmonic filters for scale-, projection-, and shift-invariant pattern recognition. Applied Optics, 1995, 34, 310.	2.1	16
110	Compact optical temporal processors. Applied Optics, 1995, 34, 4113.	2.1	7
111	Polynomial expansion for shift- and one- or two-dimensional scale-invariant pattern recognition. Applied Optics, 1995, 34, 5146.	2.1	2
112	Anamorphic fractional Fourier transform: optical implementation and applications. Applied Optics, 1995, 34, 7451.	2.1	40
113	Incoherent fractional Fourier transform and its optical implementation. Applied Optics, 1995, 34, 7615.	2.1	22
114	Two-dimensional wavelet transform achieved by computer-generated multireference matched filter and Dammann grating. Applied Optics, 1995, 34, 8213.	2.1	29
115	Logarithmic harmonics proper expansion center and order for efficient projection invariant pattern recognition. Optics Communications, 1994, 107, 292-299.	1.0	5
116	Self Fourier functions and fractional Fourier transforms. Optics Communications, 1994, 105, 36-38.	1.0	39
117	Convolution and Filtering in Fractional Fourier Domains. Optical Review, 1994, 1, 15-16.	1.2	42
118	Fractional Fourier transform as a tool for analyzing beam propagation and spherical mirror resonators. Optics Letters, 1994, 19, 1678.	1.7	83
119	Convolution, filtering, and multiplexing in fractional Fourier domains and their relation to chirp and wavelet transforms. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1994, 11, 547.	0.8	428
120	Joint transform correlator with incoherent output. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1994, 11, 3201.	0.8	8
121	Image formation of a self-Fourier object. Applied Optics, 1994, 33, 153.	2.1	16
122	Graded-index fibers, Wigner-distribution functions, and the fractional Fourier transform. Applied Optics, 1994, 33, 6188.	2.1	189
123	Chirp filtering in the fractional Fourier domain. Applied Optics, 1994, 33, 7599.	2.1	78
124	Fractional fourier transform: photonic implementation. Applied Optics, 1994, 33, 7661.	2.1	43
125	Three-dimensional image sensing based on a zone-plate array. Optics Communications, 1993, 95, 26-32.	1.0	9
126	Fourier transforms of fractional order and their optical interpretation. Optics Communications, 1993, 101, 163-169.	1.0	246

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127	Fractional Fourier transforms and their optical implementation: I. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1993, 10, 1875.	0.8	733
128	Fractional Fourier transforms and their optical implementation II. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1993, 10, 2522.	0.8	394
129	Error-diffusion binarization for joint transform correlators. Applied Optics, 1993, 32, 707.	2.1	11
130	Optical-coordinate transformation methods and optical-interconnection architectures. Applied Optics, 1993, 32, 5119.	2.1	14
131	Optical realization of the wavelet transform for two-dimensional objects. Applied Optics, 1993, 32, 6542.	2.1	52
132	Multistage optical interconnection architectures with the least possible growth of system size. Optics Letters, 1993, 18, 296.	1.7	23
133	Self-Fourier objects and other self-transform objects. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1992, 9, 2009.	0.8	49
134	Circular harmonic filters for a rotation-invariant incoherent correlator. Applied Optics, 1992, 31, 6187.	2.1	8
135	Temporal filtering with time lenses. Applied Optics, 1992, 31, 6212.	2.1	80
136	Temporal perfect-shuffle optical processor. Optics Letters, 1992, 17, 822.	1.7	10
137	An optical self-transform with odd cycles. Optics Communications, 1992, 93, 25-26.	1.0	10
138	Composite harmonics joint transform correlator for tilt invariant pattern recognition. Optics Communications, 1990, 79, 273-279.	1.0	2
139	Generalized spatial deformation harmonic filter for distortion invariant pattern recognition. Optics Communications, 1990, 78, 416-424.	1.0	6
140	Shift and projection invariant pattern recognition using logarithmic harmonics. Applied Optics, 1990, 29, 4784.	2.1	24
141	Complex reference-invariant joint-transform correlator. Optics Letters, 1990, 15, 1224.	1.7	19
142	Computation considerations and fast algorithms for calculating the diffraction integral. , 0, .		4