

# Qinghua Wang

## List of Publications by Year in descending order

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70  
papers

1,063  
citations

361413

20  
h-index

454955

30  
g-index

72  
all docs

72  
docs citations

72  
times ranked

1669  
citing authors

#	ARTICLE	IF	CITATIONS
1	Limits on Light Weakly Interacting Massive Particles from the First $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"> < mml:mrow > < mml:mn > 102.8 < /mml:mn > < mml:mtext > \hat{\epsilon} \% < /mml:mtext > < mml:mtext > kg < /mml:mtext > < mml:mo > \bar{A} < /mml:mo > $ Data of the CDEX-10 Experiment. Physical Review Letters, 2018, 120, 241301.	7.8	106
2	Constraints on Spin-Independent Nucleus Scattering with sub-GeV Weakly Interacting Massive Particle Dark Matter from the CDEX-1B Experiment at the China Jinping Underground Laboratory. Physical Review Letters, 2019, 123, 161301.	7.8	104
3	Characterization of planar periodic structure using inverse laser scanning confocal microscopy moiré method and its application in the structure of butterfly wing. Journal of Applied Physics, 2007, 101, 103511.	2.5	40
4	Dry Reforming of Methane with Carbon Dioxide Using Pulsed DC Arc Plasma at Atmospheric Pressure. Plasma Chemistry and Plasma Processing, 2010, 30, 257-266.	2.4	40
5	Two-dimensional Moiré phase analysis for accurate strain distribution measurement and application in crack prediction. Optics Express, 2017, 25, 13465.	3.4	38
6	Search for Light Weakly-Interacting-Massive-Particle Dark Matter by Annual Modulation Analysis with a Point-Contact Germanium Detector at the China Jinping Underground Laboratory. Physical Review Letters, 2019, 123, 221301.	7.8	37
7	Compressive mechanical properties of closed-cell aluminum foam-polymer composites. Composites Part B: Engineering, 2014, 64, 43-49.	12.0	34
8	Digital sampling Moiré as a substitute for microscope scanning Moiré for high-sensitivity and full-field deformation measurement at micron/nano scales. Applied Optics, 2016, 55, 6858.	2.1	31
9	Formation of secondary Moiré patterns for characterization of nanoporous alumina structures in multiple domains with different orientations. Nanoscale, 2013, 5, 2285.	5.6	30
10	Study of the surface structure of butterfly wings using the scanning electron microscopic moiré method. Applied Optics, 2007, 46, 7026.	2.1	29
11	Buckling modes of polymer membranes restricted by metal wires. Soft Matter, 2011, 7, 2888.	2.7	29
12	Optical full-field strain measurement method from wrapped sampling Moiré phase to minimize the influence of defects and its applications. Optics and Lasers in Engineering, 2018, 110, 155-162.	3.8	27
13	Direct Detection Constraints on Dark Photons with the CDEX-10 Experiment at the China Jinping Underground Laboratory. Physical Review Letters, 2020, 124, 111301.	7.8	27
14	Comparative study of sampling moiré and windowed Fourier transform techniques for demodulation of a single-fringe pattern. Applied Optics, 2018, 57, 10402.	1.8	26
15	Residual stress assessment of interconnects by slot milling with FIB and geometric phase analysis. Optics and Lasers in Engineering, 2010, 48, 1113-1118.	3.8	25
16	Crystallographic selection rule for the propagation mode of microstructurally small fatigue crack in a laminated Ti-6Al-4V alloy: Roles of basal and pyramidal slips. International Journal of Fatigue, 2019, 128, 105200.	5.7	25
17	Three-directional structural characterization of hexagonal packed nanoparticles by hexagonal digital moiré method. Optics Letters, 2012, 37, 548.	3.3	24
18	Nanometer-order thermal deformation measurement by a calibrated phase-shifting digital holography system. Optics Express, 2018, 26, 12594.	3.4	24

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19	Spatiotemporal phase-shifting method for accurate phase analysis of fringe pattern. Journal of Optics (United Kingdom), 2019, 21, 095702.	2.2	23
20	A new method for the reconstruction of micro- and nanoscale planar periodic structures. Ultramicroscopy, 2010, 110, 1223-1230.	1.9	21
21	Simultaneous analysis of residual stress and stress intensity factor in a resist after UV-nanoimprint lithography based on electron moiré fringes. Journal of Micromechanics and Microengineering, 2012, 22, 105021.	2.6	19
22	Displacement measurement of concrete bridges by the sampling Moiré method based on phase analysis of repeated pattern. Strain, 2020, 56, e12351.	2.4	19
23	Calibrated phase-shifting digital holography based on a dual-camera system. Optics Letters, 2017, 42, 4954.	3.3	17
24	Sampling Moiré method for full-field deformation measurement: A brief review. Theoretical and Applied Mechanics Letters, 2022, 12, 100327.	2.8	16
25	Measurement of interfacial toughness of metal film wire and polymer membrane through electricity induced buckling method. Journal of Colloid and Interface Science, 2011, 358, 491-496.	9.4	15
26	Multiscale in situ deformation experiments: A sequential process from strain localization to failure in a laminated Ti-6Al-4V alloy. Materials Characterization, 2017, 128, 217-225.	4.4	14
27	Phase-shifting laser scanning confocal microscopy moiré method and its applications. Measurement Science and Technology, 2010, 21, 055110.	2.6	13
28	Residual Thermal Strain Distribution Measurement of Underfills in Flip Chip Electronic Packages by an Inverse Approach Based on the Sampling Moiré Method. Experimental Mechanics, 2020, 60, 611-626.	2.0	13
29	Second-order moiré method for accurate deformation measurement with a large field of view. Optics Express, 2020, 28, 7498.	3.4	13
30	A new mark shearing technique for strain measurement using digital image correlation method. Review of Scientific Instruments, 2008, 79, 105101.	1.3	12
31	Micro/submicro grating fabrication on metals for deformation measurement based on ultraviolet nanoimprint lithography. Optics and Lasers in Engineering, 2013, 51, 944-948.	3.8	12
32	Characterization technique for detection of atom-size crystalline defects and strains using two-dimensional fast-Fourier-transform sampling Moiré method. Japanese Journal of Applied Physics, 2018, 57, 04FC04.	1.5	12
33	In situ high temperature creep deformation of micro-structure with metal film wire on flexible membrane using geometric phase analysis. Microelectronics Reliability, 2013, 53, 652-657.	1.7	11
34	Spot Moiré Fringes: Determination of Domain Boundaries and Structural Parameters in Ordered Nanoporous Structures. Chemistry - A European Journal, 2014, 20, 2179-2183.	3.3	10
35	Accurate phase analysis of interferometric fringes by the spatiotemporal phase-shifting method. Journal of Optics (United Kingdom), 2020, 22, 105703.	2.2	10
36	1-second-resolved strain mapping in Ti-6Al-4V alloys during dwell fatigue in SEM by video sampling moiré. Mechanics of Materials, 2019, 133, 63-70.	3.2	9

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37	Automatic detection of defect positions including interface dislocations and strain measurement in Ge/Si heterostructure from moiré phase processing of TEM image. <i>Optics and Lasers in Engineering</i> , 2020, 129, 106077.	3.8	9
38	A study on the mechanical properties of beagle femoral head using the digital speckle correlation method. <i>Medical Engineering and Physics</i> , 2009, 31, 1228-1234.	1.7	8
39	Interlaminar Shear Behavior of Laminated Carbon Fiber Reinforced Plastic from Microscale Strain Distributions Measured by Sampling Moiré Technique. <i>Materials</i> , 2018, 11, 1684.	2.9	8
40	Multiplication sampling moire method for full-field deformation measurement of composite materials. <i>Optics Letters</i> , 2022, 47, 70.	3.3	8
41	Calibrated phase-shifting digital holography based on space-division multiplexing. <i>Optics and Lasers in Engineering</i> , 2019, 123, 8-13.	3.8	7
42	Developments and Applications of Moire Techniques for Deformation Measurement, Structure Characterization and Shape Analysis. <i>Recent Patents on Materials Science</i> , 2015, 8, 188-207.	0.5	6
43	Deformation Measurement Method Using Moiré Fringes at High Scanning Speed Under a Laser Scanning Microscope. <i>Optics</i> , 2015, 4, 43.	0.2	6
44	STEM multiplication nano-moiré method with large field of view and high sensitivity. <i>Nanotechnology</i> , 2021, 32, 475705.	2.6	5
45	Measurement of microscopic strain distributions of CFRP laminates with fiber discontinuities by sampling moiré method. <i>Advanced Composite Materials</i> , 2022, 31, 273-288.	1.9	5
46	Point defect detection and strain mapping in Si single crystal by two-dimensional multiplication moiré method. <i>Nanoscale</i> , 2021, 13, 16900-16908.	5.6	5
47	Sampling moiré as a special windowed Fourier ridges algorithm in demodulation of carrier fringe patterns. <i>Optical Engineering</i> , 2018, 57, 1.	1.0	5
48	Random phase-shifting digital holography based on a self-calibrated system. <i>Optics Express</i> , 2020, 28, 19988.	3.4	5
49	Impact of system factors on the water saving efficiency of household grey water recycling. <i>Desalination and Water Treatment</i> , 2010, 24, 226-235.	1.0	3
50	The Residual Strain Measurement of Thin Conductive Metal Wire after Electrical Failure with SEM Moiré. <i>Acta Mechanica Solida Sinica</i> , 2016, 29, 371-378.	1.9	3
51	Calibrated Phase-Shifting Digital Holographic Microscope Using a Sampling Moiré Technique. <i>Applied Sciences (Switzerland)</i> , 2018, 8, 706.	2.5	3
52	Data of dynamic microscale strain distributions of Ti-6Al-4V alloys in dwell fatigue tests. <i>Data in Brief</i> , 2019, 25, 104338.	1.0	3
53	Wide-view and accurate deformation measurement at microscales by phase extraction of scanning moiré pattern with a spatial phase-shifting technique. <i>Applied Optics</i> , 2021, 60, 1637.	1.8	3
54	Moiré Techniques Based on Memory Function of Laser Scanning Microscope for Deformation Measurement at Micron/Submicron Scales. <i>International Journal of Automation Technology</i> , 2015, 9, 494-501.	1.0	3

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55	Instability and failure analysis of film-substrate structure under electrical loading. , 2009, , .		2
56	Characterization of the arrangement feature of copper interconnects by MoirÃ© inversion method. Theoretical and Applied Mechanics Letters, 2012, 2, 021008.	2.8	2
57	Micro/Nano-scale Strain Distribution Measurement from Sampling Moir&#233; Fringes. Journal of Visualized Experiments, 2017, , .	0.3	2
58	Accurate Strain Distribution Measurement Based on the Sampling MoirÃ© Method. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 243-249.	0.5	2
59	Stereo sampling moirÃ© method for three-dimensional deformation mapping with a stereomicroscope. Optics Express, 2022, 30, 29310.	3.4	2
60	Formation of Three-Way Scanning Electron Microscope MoirÃ© on Micro/Nanostructures. Scientific World Journal, The, 2014, 2014, 1-8.	2.1	1
61	Deformation measurement of carbon fiber reinforced plastics using phase-shifting scanning electron microscope MoirÃ© method after Fourier transform. Proceedings of SPIE, 2015, , .	0.8	1
62	Dynamic deformation measurement of dual-wavelength random phase-shifting digital holography with automatic phase-shift detection. Applied Optics, 2022, 61, B103-B110.	1.8	1
63	OS1-2-3 Experimental Study on the Laser Scanning Confocal Microscopy Moire Method. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2007, 2007.6, _OS1-2-3-1-_OS1-2-3-4.	0.0	0
64	OS010-1-2 Characterization of the Planar Arrangement Feature of Copper Interconnects by Moire Inversion Method. The Abstracts of ATEM International Conference on Advanced Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2011, 2011.10, _OS010-1-2.	0.0	0
65	701 Fabrication of an Anisotropic Porous Metal Including Polymer by the Tool for Realizing Hybridized New Functions. The Proceedings of the Materials and Processing Conference, 2013, 2013.21, _701-1-_701-3_.	0.0	0
66	707 Measurement of Mechanical Property of the Porous Materials with Anisotropic Cell. The Proceedings of the Materials and Processing Conference, 2013, 2013.21, _707-1-_707-4_.	0.0	0
67	620 Fabrication of Glass Substrate by Pulse Electric Current Sintering. The Proceedings of the Materials and Processing Conference, 2013, 2013.21, _620-1-_620-3_.	0.0	0
68	J112014 Generation of overlap-scanning laser microscope moire fringes using micro grids for in-situ deformation measurement. The Proceedings of Mechanical Engineering Congress Japan, 2013, 2013, _J112014-1-_J112014-4.	0.0	0
69	Full-Field Measurements of Principal Strains and Orientations Using MoirÃ© Fringes. Conference Proceedings of the Society for Experimental Mechanics, 2017, , 251-259.	0.5	0
70	Influence of working distance on microscale strain measurement under laser scanning microscope from moirÃ© fringes. , 2017, , .		0