

# Justin S Wark

## List of Publications by Year in Descending Order

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

180  
papers

7,560  
citations

47  
h-index

82  
g-index

202  
ext. papers

8,325  
ext. citations

6.3  
avg, IF

4.97  
L-index

#	Paper	IF	Citations
180	Metastability of diamond ramp-compressed to 2 terapascals. <i>Nature</i> , <b>2021</b> , 589, 532-535	50.4	30
179	A history of high-power laser research and development in the United Kingdom. <i>High Power Laser Science and Engineering</i> , <b>2021</b> , 9,	4.3	2
178	Demonstration of Geometric Effects and Resonant Scattering in the X-Ray Spectra of High-Energy-Density Plasmas. <i>Physical Review Letters</i> , <b>2021</b> , 126, 085001	7.4	1
177	Kinematics of slip-induced rotation for uniaxial shock or ramp compression. <i>Journal of Applied Physics</i> , <b>2021</b> , 129, 085109	2.5	2
176	Molecular dynamics simulations of inelastic x-ray scattering from shocked copper. <i>Journal of Applied Physics</i> , <b>2021</b> , 130, 125901	2.5	1
175	High-resolution inelastic x-ray scattering at the high energy density scientific instrument at the European X-Ray Free-Electron Laser. <i>Review of Scientific Instruments</i> , <b>2021</b> , 92, 013101	1.7	6
174	Probing the Electronic Structure of Warm Dense Nickel via Resonant Inelastic X-Ray Scattering. <i>Physical Review Letters</i> , <b>2020</b> , 125, 195001	7.4	3
173	Time-Resolved XUV Opacity Measurements of Warm Dense Aluminum. <i>Physical Review Letters</i> , <b>2020</b> , 124, 225002	7.4	6
172	X-ray diffraction at the National Ignition Facility. <i>Review of Scientific Instruments</i> , <b>2020</b> , 91, 043902	1.7	24
171	Recovery of a high-pressure phase formed under laser-driven compression. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	7
170	A novel method to measure ion density in ICF experiments using x-ray spectroscopy of cylindrical tracers. <i>Physics of Plasmas</i> , <b>2020</b> , 27, 112714	2.1	2
169	X-ray Spectroscopic Studies of a Solid-Density Germanium Plasma Created by a Free Electron Laser. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 8153	2.6	
168	Investigating off-Hugoniot states using multi-layer ring-up targets. <i>Scientific Reports</i> , <b>2020</b> , 10, 13172	4.9	3
167	An approach for the measurement of the bulk temperature of single crystal diamond using an X-ray free electron laser. <i>Scientific Reports</i> , <b>2020</b> , 10, 14564	4.9	10
166	Femtosecond quantification of void evolution during rapid material failure. <i>Science Advances</i> , <b>2020</b> , 6,	14.3	10
165	Ab initio simulations and measurements of the free-free opacity in aluminum. <i>Physical Review E</i> , <b>2019</b> , 100, 043207	2.4	9
164	Recovery of metastable dense Bi synthesized by shock compression. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 120601	3.4	9

163	Identification of Phase Transitions and Metastability in Dynamically Compressed Antimony Using Ultrafast X-Ray Diffraction. <i>Physical Review Letters</i> , <b>2019</b> , 122, 255704	7.4	21
162	Laboratory measurements of geometrical effects in the x-ray emission of optically thick lines for ICF diagnostics. <i>Physics of Plasmas</i> , <b>2019</b> , 26, 063302	2.1	7
161	Molecular dynamics simulations of grain interactions in shock-compressed highly textured columnar nanocrystals. <i>Physical Review Materials</i> , <b>2019</b> , 3,	3.2	4
160	Nonisentropic Release of a Shocked Solid. <i>Physical Review Letters</i> , <b>2019</b> , 123, 245501	7.4	5
159	Phase transition lowering in dynamically compressed silicon. <i>Nature Physics</i> , <b>2019</b> , 15, 89-94	16.2	45
158	Clocking Femtosecond Collisional Dynamics via Resonant X-Ray Spectroscopy. <i>Physical Review Letters</i> , <b>2018</b> , 120, 055002	7.4	15
157	Validating Continuum Lowering Models via Multi-Wavelength Measurements of Integrated X-ray Emission. <i>Scientific Reports</i> , <b>2018</b> , 8, 6276	4.9	12
156	Simultaneous 8.2 keV phase-contrast imaging and 24.6 keV X-ray diffraction from shock-compressed matter at the LCLS. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 221907	3.4	17
155	Comments on A new theory for X-ray diffraction. <i>Acta Crystallographica Section A: Foundations and Advances</i> , <b>2018</b> , 74, 447-456	1.7	1
154	Femtosecond diffraction studies of solid and liquid phase changes in shock-compressed bismuth. <i>Scientific Reports</i> , <b>2018</b> , 8, 16927	4.9	27
153	Femtosecond X-Ray Diffraction Studies of the Reversal of the Microstructural Effects of Plastic Deformation during Shock Release of Tantalum. <i>Physical Review Letters</i> , <b>2018</b> , 120, 265502	7.4	35
152	Ultrafast X-Ray Diffraction Studies of the Phase Transitions and Equation of State of Scandium Shock Compressed to 82 GPa. <i>Physical Review Letters</i> , <b>2017</b> , 118, 025501	7.4	44
151	Atomic processes modeling of X-ray free electron laser produced plasmas using SCFLY code <b>2017</b> ,		4
150	In situ X-ray diffraction measurement of shock-wave-driven twinning and lattice dynamics. <i>Nature</i> , <b>2017</b> , 550, 496-499	50.4	76
149	Short-wavelength free-electron laser sources and science: a review. <i>Reports on Progress in Physics</i> , <b>2017</b> , 80, 115901	14.4	111
148	Measurements of the K-Shell Opacity of a Solid-Density Magnesium Plasma Heated by an X-Ray Free-Electron Laser. <i>Physical Review Letters</i> , <b>2017</b> , 119, 085001	7.4	10
147	Observation of Reverse Saturable Absorption of an X-ray Laser. <i>Physical Review Letters</i> , <b>2017</b> , 119, 075002	7.4	9
146	X-ray diffraction measurements of plasticity in shock-compressed vanadium in the region of 10 GPa. <i>Journal of Applied Physics</i> , <b>2017</b> , 122, 025117	2.5	10

145	Simultaneous diagnosis of radial profiles and mix in NIF ignition-scale implosions via X-ray spectroscopy. <i>Physics of Plasmas</i> , <b>2017</b> , 24, 112703	2.1	6
144	Simulations of the time and space-resolved x-ray transmission of a free-electron-laser-heated aluminium plasma. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , <b>2016</b> , 49, 035603	1.3	2
143	Detailed model for hot-dense aluminum plasmas generated by an x-ray free electron laser. <i>Physics of Plasmas</i> , <b>2016</b> , 23, 022707	2.1	15
142	Measurements of continuum lowering in solid-density plasmas created from elements and compounds. <i>Nature Communications</i> , <b>2016</b> , 7, 11713	17.4	64
141	Inelastic response of silicon to shock compression. <i>Scientific Reports</i> , <b>2016</b> , 6, 24211	4.9	18
140	Investigation of femtosecond collisional ionization rates in a solid-density aluminium plasma. <i>Nature Communications</i> , <b>2015</b> , 6, 6397	17.4	62
139	Single Hit Energy-resolved Laue Diffraction. <i>Review of Scientific Instruments</i> , <b>2015</b> , 86, 053908	1.7	2
138	The creation of large-volume, gradient-free warm dense matter with an x-ray free-electron laser. <i>Physics of Plasmas</i> , <b>2015</b> , 22, 030703	2.1	38
137	Imaging Shock Waves in Diamond with Both High Temporal and Spatial Resolution at an XFEL. <i>Scientific Reports</i> , <b>2015</b> , 5, 11089	4.9	62
136	Direct Observation of Melting in Shock-Compressed Bismuth With Femtosecond X-ray Diffraction. <i>Physical Review Letters</i> , <b>2015</b> , 115, 095701	7.4	53
135	Simulations of in situ x-ray diffraction from uniaxially compressed highly textured polycrystalline targets. <i>Journal of Applied Physics</i> , <b>2015</b> , 118, 065902	2.5	15
134	From microjoules to megajoules and kilobars to gigabars: Probing matter at extreme states of deformation. <i>Physics of Plasmas</i> , <b>2015</b> , 22, 090501	2.1	35
133	Imaging transient melting of a nanocrystal using an X-ray laser. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2015</b> , 112, 7444-8	11.5	49
132	Saturable absorption of an x-ray free-electron-laser heated solid-density aluminum plasma. <i>Physical Review Letters</i> , <b>2015</b> , 114, 015003	7.4	38
131	Density functional theory calculations of continuum lowering in strongly coupled plasmas. <i>Nature Communications</i> , <b>2014</b> , 5, 3533	17.4	74
130	Molecular dynamics simulations of shock-induced plasticity in tantalum. <i>High Energy Density Physics</i> , <b>2014</b> , 10, 9-15	1.2	64
129	Shock waves in polycrystalline iron: Plasticity and phase transitions. <i>Physical Review B</i> , <b>2014</b> , 89,	3.3	47
128	Molecular dynamics simulations of shock-compressed single-crystal silicon. <i>Physical Review B</i> , <b>2014</b> , 89,	3.3	31

127	Combined Hydrodynamic and Diffraction Simulations of Femtosecond X-ray Scattering from Laser-Shocked Crystals. <i>Journal of Physics: Conference Series</i> , <b>2014</b> , 500, 152016	0.3	3
126	Investigations into rapid uniaxial compression of polycrystalline targets using femtosecond X-ray diffraction. <i>Journal of Physics: Conference Series</i> , <b>2014</b> , 500, 112063	0.3	2
125	Comley et al. reply. <i>Physical Review Letters</i> , <b>2014</b> , 113, 039602	7.4	2
124	Single photon energy dispersive x-ray diffraction. <i>Review of Scientific Instruments</i> , <b>2014</b> , 85, 033906	1.7	10
123	Molecular dynamics simulations of shock-induced deformation twinning of a body-centered-cubic metal. <i>Physical Review B</i> , <b>2013</b> , 88,	3.3	44
122	Fourier-transform inelastic X-ray scattering from time- and momentum-dependent phonon-phonon correlations. <i>Nature Physics</i> , <b>2013</b> , 9, 790-794	16.2	118
121	Ultrafast three-dimensional imaging of lattice dynamics in individual gold nanocrystals. <i>Science</i> , <b>2013</b> , 341, 56-9	33.3	228
120	The effects of ionization potential depression on the spectra emitted by hot dense aluminium plasmas. <i>High Energy Density Physics</i> , <b>2013</b> , 9, 258-263	1.2	54
119	Strength of shock-loaded single-crystal tantalum [100] determined using in situ broadband x-ray Laue diffraction. <i>Physical Review Letters</i> , <b>2013</b> , 110, 115501	7.4	57
118	Femtosecond visualization of lattice dynamics in shock-compressed matter. <i>Science</i> , <b>2013</b> , 342, 220-3	33.3	150
117	Comparison between x-ray scattering and velocity-interferometry measurements from shocked liquid deuterium. <i>Physical Review E</i> , <b>2013</b> , 87, 043112	2.4	17
116	Molecular dynamics simulations of ramp-compressed copper. <i>Physical Review B</i> , <b>2012</b> , 85,	3.3	10
115	Nanosecond white-light Laue diffraction measurements of dislocation microstructure in shock-compressed single-crystal copper. <i>Nature Communications</i> , <b>2012</b> , 3, 1224	17.4	41
114	Creation and diagnosis of a solid-density plasma with an X-ray free-electron laser. <i>Nature</i> , <b>2012</b> , 482, 59-62	50.4	343
113	Direct measurements of the ionization potential depression in a dense plasma. <i>Physical Review Letters</i> , <b>2012</b> , 109, 065002	7.4	198
112	Probing dynamic material strength using in situ x-ray diffraction <b>2012</b> ,		2
111	Resonant K $\alpha$ spectroscopy of solid-density aluminum plasmas. <i>Physical Review Letters</i> , <b>2012</b> , 109, 245003	7.4	54
110	Testing quantum mechanics in non-Minkowski space-time with high power lasers and 4(th) generation light sources. <i>Scientific Reports</i> , <b>2012</b> , 2, 491	4.9	8

109	In situ x-ray diffraction measurements of the $c/a$ ratio in the high-pressure phase of shock-compressed polycrystalline iron. <i>Physical Review B</i> , <b>2011</b> , 83,	3.3	64
108	Simulations of copper single crystals subjected to rapid shear. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 063539	3.3	16
107	Simulations of neon irradiated by intense X-ray laser radiation. <i>High Energy Density Physics</i> , <b>2011</b> , 7, 111-116	3.3	27
106	Decay of crystalline order and equilibration during the solid-to-plasma transition induced by 20-fs microfocused 92-eV free-electron-laser pulses. <i>Physical Review Letters</i> , <b>2011</b> , 106, 164801	7.4	32
105	Bragg diffraction using a 100 ps 17.5 keV x-ray backlighter and the Bragg diffraction imager. <i>Review of Scientific Instruments</i> , <b>2010</b> , 81, 10E522	1.7	4
104	Nanosecond x-ray Laue diffraction apparatus suitable for laser shock compression experiments. <i>Review of Scientific Instruments</i> , <b>2010</b> , 81, 083902	1.7	16
103	The strength of single crystal copper under uniaxial shock compression at 100 GPa. <i>Journal of Physics Condensed Matter</i> , <b>2010</b> , 22, 065404	1.8	60
102	Phonon instabilities in uniaxially compressed fcc metals as seen in molecular dynamics simulations. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	20
101	Electronic structure of an XUV photogenerated solid-density aluminum plasma. <i>Physical Review Letters</i> , <b>2010</b> , 104, 225001	7.4	52
100	Metal deformation and phase transitions at extremely high strain rates. <i>MRS Bulletin</i> , <b>2010</b> , 35, 999-1006	3.2	23
99	Predicting EXAFS signals from shock compressed iron by use of molecular dynamics simulations. <i>High Energy Density Physics</i> , <b>2009</b> , 5, 44-50	1.2	6
98	Free-free opacity in warm dense aluminum. <i>High Energy Density Physics</i> , <b>2009</b> , 5, 124-131	1.2	30
97	Soft x-ray free electron laser microfocus for exploring matter under extreme conditions. <i>Optics Express</i> , <b>2009</b> , 17, 18271-8	3.3	38
96	Simulating picosecond x-ray diffraction from shocked crystals using post-processing molecular dynamics calculations. <i>Journal of Physics Condensed Matter</i> , <b>2008</b> , 20, 505203	1.8	19
95	Shocked materials at the intersection of experiment and simulation. <i>Lecture Notes in Computational Science and Engineering</i> , <b>2008</b> , 159-186	0.3	
94	Optically induced lattice dynamics probed with ultrafast x-ray diffraction. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	11
93	Molecular dynamics simulations of the Debye-Waller effect in shocked copper. <i>Physical Review B</i> , <b>2008</b> , 78,	3.3	9
92	High-pressure nanocrystalline structure of a shock-compressed single crystal of iron. <i>Physical Review B</i> , <b>2008</b> , 78,	3.3	41

91	SIMULATING PICOSECOND X-RAY DIFFRACTION FROM CRYSTALS USING FFT METHODS ON MD OUTPUT <b>2008</b> ,		1
90	Shocked materials at the intersection of experiment and simulation. <i>Scientific Modeling and Simulation SMNS</i> , <b>2008</b> , 15, 159-186		14
89	Line intensity enhancements in stellar coronal X-ray spectra due to opacity effects. <i>Astronomy and Astrophysics</i> , <b>2008</b> , 483, 887-890	5.1	9
88	Shock waves in polycrystalline iron. <i>Physical Review Letters</i> , <b>2007</b> , 98, 135701	7.4	122
87	Modeling Planetary Interiors in Laser Based Experiments Using Shockless Compression. <i>Astrophysics and Space Science</i> , <b>2007</b> , 307, 285-289	1.6	10
86	Nanosecond x-ray diffraction from polycrystalline and amorphous materials in a pinhole camera geometry suitable for laser shock compression experiments. <i>Review of Scientific Instruments</i> , <b>2007</b> , 78, 083908	1.7	22
85	Large acoustic transients induced by nonthermal melting of InSb. <i>Physical Review Letters</i> , <b>2007</b> , 98, 225502	7.4	12
84	Modeling Planetary Interiors in Laser Based Experiments Using Shockless Compression <b>2007</b> , 285-289		
83	Simulations of time-resolved x-ray diffraction in Laue geometry. <i>Journal of Physics Condensed Matter</i> , <b>2006</b> , 18, 9231-9244	1.8	4
82	Picosecond X-Ray Diffraction from Laser-Shocked Copper and Iron. <i>AIP Conference Proceedings</i> , <b>2006</b> ,	0	4
81	Radiation transfer effects on the spectra of laser-generated plasmas. <i>Physical Review Letters</i> , <b>2006</b> , 96, 185002	7.4	2
80	Measuring stacking fault densities in shock-compressed FCC crystals using in situ x-ray diffraction. <i>Journal of Physics Condensed Matter</i> , <b>2006</b> , 18, 6749-6757	1.8	18
79	Analysis of the x-ray diffraction signal for the $\beta$ transition in shock-compressed iron: Simulation and experiment. <i>Physical Review B</i> , <b>2006</b> , 74,	3.3	94
78	Shock deformation of face-centred-cubic metals on subnanosecond timescales. <i>Nature Materials</i> , <b>2006</b> , 5, 805-9	27	197
77	Atomic-scale visualization of inertial dynamics. <i>Science</i> , <b>2005</b> , 308, 392-5	33.3	286
76	Direct observation of the alpha-epsilon transition in shock-compressed iron via nanosecond x-ray diffraction. <i>Physical Review Letters</i> , <b>2005</b> , 95, 075502	7.4	233
75	Opportunities and challenges using short-pulse x-ray sources. <i>Journal of Physics: Conference Series</i> , <b>2005</b> , 21, 87-94	0.3	
74	An Analytic Geometry-Variant Approach to Line Ratio Enhancement above the Optically Thin Limit. <i>Astrophysical Journal</i> , <b>2005</b> , 629, 1091-1101	4.7	15

73	X-Ray Line Transfer in Plasmas with Large Velocity Gradients. <i>Astrophysics and Space Science</i> , <b>2005</b> , 298, 171-176	1.6	1
72	Observation of structural anisotropy and the onset of liquidlike motion during the nonthermal melting of InSb. <i>Physical Review Letters</i> , <b>2005</b> , 95, 125701	7.4	49
71	Clocking femtosecond X rays. <i>Physical Review Letters</i> , <b>2005</b> , 94, 114801	7.4	196
70	Picosecond x-ray studies of coherent folded acoustic phonons in a multiple quantum well. <i>Physical Review Letters</i> , <b>2005</b> , 94, 125509	7.4	29
69	Thomson scattering measurements of heat flow in a laser-produced plasma. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , <b>2004</b> , 37, 1541-1551	1.3	16
68	Materials science under extreme conditions of pressure and strain rate. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , <b>2004</b> , 35, 2587-2607	2.3	74
67	Simulations of a photopumped X-ray laser using the H-like CIII-like Se scheme. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2004</b> , 83, 203-213	2.1	
66	X-Ray Diffraction from Shocked Crystals: Experiments and Predictions of Molecular Dynamics Simulations. <i>AIP Conference Proceedings</i> , <b>2004</b> ,	0	3
65	Enhancement of Optically Thick to Thin Line Intensities in Solar and Stellar Coronal Plasmas through Radiative Transfer Effects: An Angularly Resolved Study. <i>Astrophysical Journal</i> , <b>2004</b> , 613, L181-L184	4.7	15
64	Extension of the time-dependent dynamical diffraction theory to optical phonon-type distortions: application to diffraction from coherent acoustic and optical phonons. <i>Acta Crystallographica Section A: Foundations and Advances</i> , <b>2003</b> , 59, 7-13		17
63	Finite temperature dense matter studies on next-generation light sources. <i>Journal of the Optical Society of America B: Optical Physics</i> , <b>2003</b> , 20, 770	1.7	130
62	High-pressure, high-strain-rate lattice response of shocked materials. <i>Physics of Plasmas</i> , <b>2003</b> , 10, 1569-1576	4.0	
61	Multiple film plane diagnostic for shocked lattice measurements (invited). <i>Review of Scientific Instruments</i> , <b>2003</b> , 74, 1929-1934	1.7	32
60	Investigation of the onset and development of forward scattering in an underdense plasma. <i>Physical Review Letters</i> , <b>2003</b> , 90, 245001	7.4	4
59	Transient strain driven by a dense electron-hole plasma. <i>Physical Review Letters</i> , <b>2003</b> , 91, 165502	7.4	34
58	K-shell spectroscopy of an independently diagnosed uniaxially expanding laser-produced aluminum plasma. <i>Physical Review E</i> , <b>2002</b> , 66, 026410	2.4	20
57	Coherent control of phonons probed by time-resolved x-ray diffraction. <i>Optics Letters</i> , <b>2002</b> , 27, 869-71	3	18
56	Simulation of the time-dependent dynamical diffraction of FEL x-ray pulses <b>2001</b> ,		1



55	Femtosecond x-ray diffraction: experiments and limits <b>2001</b> ,		9
54	Simulations of Al XIII Be XXIV X-ray laser photopumping scheme. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2001</b> , 71, 129-138	2.1	8
53	Detailed simulations of sonoluminescence spectra. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , <b>2001</b> , 34, L511-L518	1.3	4
52	Anomalous elastic response of silicon to uniaxial shock compression on nanosecond time scales. <i>Physical Review Letters</i> , <b>2001</b> , 86, 2349-52	7.4	161
51	A fluid-kinetic model for the two plasmon decay instability. <i>Physics of Plasmas</i> , <b>2001</b> , 8, 4357-4366	2.1	1
50	A versatile matrix-based solution for the two plasmon decay instability. <i>Physics of Plasmas</i> , <b>2001</b> , 8, 704-712	2.1	3
49	Probing impulsive strain propagation with X-ray pulses. <i>Physical Review Letters</i> , <b>2001</b> , 86, 3072-5	7.4	136
48	Calculations of the modal photon densities and gain in a K/Cl resonantly photopumped X-ray laser. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , <b>2000</b> , 65, 71-81	2.1	7
47	Solid-state experiments at high pressure and strain rate. <i>Physics of Plasmas</i> , <b>2000</b> , 7, 1999-2006	2.1	57
46	Effect of the plasma density scale length on the direction of fast electrons in relativistic laser-solid interactions. <i>Physical Review Letters</i> , <b>2000</b> , 84, 1459-62	7.4	185
45	Photonuclear physics when a multiterawatt laser pulse interacts with solid targets. <i>Physical Review Letters</i> , <b>2000</b> , 84, 899-902	7.4	200
44	Time-resolved X-Ray diffraction from coherent phonons during a laser-induced phase transition. <i>Physical Review Letters</i> , <b>2000</b> , 84, 111-4	7.4	293
43	Observation of a highly directional $\gamma$ ray beam from ultrashort, ultraintense laser pulse interactions with solids. <i>Physics of Plasmas</i> , <b>1999</b> , 6, 2150-2156	2.1	175
42	Transient x-ray diffraction used to diagnose shock compressed Si crystals on the Nova laser. <i>Review of Scientific Instruments</i> , <b>1999</b> , 70, 629-632	1.7	27
41	Vertical variant of a double channel-cut crystal spectrometer for investigation of laser-generated plasmas. <i>Review of Scientific Instruments</i> , <b>1999</b> , 70, 3025-3031	1.7	5
40	Optimization of double pulse pumping for Ni-like Sm x-ray lasers. <i>Journal of Applied Physics</i> , <b>1999</b> , 85, 672-675	2.5	19
39	Spectral line formation in dense large-gradient plasma. <i>European Physical Journal D</i> , <b>1998</b> , 48, 557-563		
38	Role of the plasma scale length in the harmonic generation from solid targets. <i>Physical Review E</i> , <b>1998</b> , 58, R5253-R5256	2.4	117

37	keV x-ray spectroscopy of plasmas produced by the intense picosecond irradiation of a gas of xenon clusters. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , <b>1998</b> , 31, 2825-2831	1.3	44
36	Generation of bright, extreme-ultraviolet harmonic radiation from a krypton fluoride laser. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , <b>1998</b> , 31, 1069-1082	1.3	4
35	The Optimisation of Soft X-Ray Laser Output <b>1998</b> , 59-64		
34	Comparison of the semiclassical and modified semiempirical method of spectral calculation. <i>Physical Review E</i> , <b>1997</b> , 56, 936-946	2.4	5
33	Astrophysically relevant experiments on radiation transfer through plasmas with large velocity gradients. <i>Physics of Plasmas</i> , <b>1997</b> , 4, 2004-2010	2.1	15
32	Demonstration of Saturation in a Ni-like Ag X-Ray Laser at 14 nm. <i>Physical Review Letters</i> , <b>1997</b> , 78, 3856-3859	2.3	87
31	Near-field spatial imaging of a Ni-like Ag 140-Å x-ray laser. <i>Physical Review A</i> , <b>1997</b> , 56, 3161-3165	2.6	13
30	Modeling of time resolved x-ray diffraction from laser-shocked crystals. <i>Journal of Applied Physics</i> , <b>1997</b> , 81, 3023-3037	2.5	9
29	Imaging of high harmonic radiation emitted during the interaction of a 20 TW laser with a solid target. <i>Journal of Applied Physics</i> , <b>1997</b> , 81, 2055-2058	2.5	9
28	A Saturated X-ray Laser Beam at 7 Nanometers. <i>Science</i> , <b>1997</b> , 276, 1097-1100	3.3	128
27	Ultrafast x-ray diffraction using a streak-camera detector in averaging mode. <i>Optics Letters</i> , <b>1997</b> , 22, 1012-4	3	56
26	Efficient extreme UV harmonics generated from picosecond laser pulse interactions with solid targets. <i>Physical Review Letters</i> , <b>1996</b> , 76, 1832-1835	7.4	269
25	Measurements of the hole boring velocity from Doppler shifted harmonic emission from solid targets. <i>Physics of Plasmas</i> , <b>1996</b> , 3, 3242-3244	2.1	58
24	Development of XUV lasers at the RAL Central Laser Facility. <i>Optical and Quantum Electronics</i> , <b>1996</b> , 28, 201-208	2.4	3
23	High-order harmonics of 248.6-nm KrF laser from helium and neon ions. <i>Physical Review A</i> , <b>1996</b> , 53, R3123-34	2.3	100
22	Time-resolved X-ray diffraction. <i>Contemporary Physics</i> , <b>1996</b> , 37, 205-218	3.3	25
21	Coherence and bandwidth measurements of harmonics generated from solid surfaces irradiated by intense picosecond laser pulses. <i>Physical Review A</i> , <b>1996</b> , 54, 1597-1603	2.6	34
20	Spectroscopy of compressed high energy density matter. <i>Physical Review E</i> , <b>1996</b> , 53, 6396-6402	2.4	28

19	Saturated output of a Ge. <i>Physical Review A</i> , <b>1996</b> , 54, R4653-R4656	2.6	52
18	Plasma Temperature in Optical Field Ionization of Gases by Intense Ultrashort Pulses of Ultraviolet Radiation. <i>Physical Review Letters</i> , <b>1995</b> , 74, 554-557	7.4	47
17	Novel plasma source for dense plasma effects. <i>Physical Review Letters</i> , <b>1995</b> , 74, 3616-3619	7.4	19
16	Orthogonal strains and onset of plasticity in shocked LiF crystals. <i>Physical Review B</i> , <b>1995</b> , 52, 8-11	3.3	25
15	Vertical dispersion mode double-crystal spectrometer for advanced spectroscopy of laser-produced plasma. <i>Review of Scientific Instruments</i> , <b>1995</b> , 66, 3234-3243	1.7	13
14	Effect of velocity gradients on x-ray line transfer in laser-produced plasmas. <i>Physical Review Letters</i> , <b>1994</b> , 72, 1826-1829	7.4	25
13	Production of strongly coupled plasmas by the laser irradiation of thin metallic films confined within micrometer-scale gaps by transparent insulators. <i>Physical Review E</i> , <b>1994</b> , 50, 3935-3942	2.4	7
12	Generation of large, high density, homogeneous plasma by capillary discharge. <i>Applied Physics Letters</i> , <b>1994</b> , 64, 3542-3544	3.4	7
11	Characterization of a capillary-discharge plasma. <i>Physical Review E</i> , <b>1993</b> , 47, 1305-1312	2.4	9
10	Double-crystal high-resolution x-ray spectroscopy of laser-produced plasmas. <i>Review of Scientific Instruments</i> , <b>1993</b> , 64, 26-30	1.7	17
9	Electron temperature of optically ionized gases produced by high intensity 268 nm laser radiation. <i>Physical Review Letters</i> , <b>1993</b> , 71, 3983-3986	7.4	28
8	Novel measurements of high-dynamic crystal strength by picosecond x-ray diffraction. <i>Applied Physics Letters</i> , <b>1992</b> , 61, 651-653	3.4	19
7	Sub-nanosecond X-Ray Diffraction from Laser-Shocked Crystals. <i>Springer Series in Optical Sciences</i> , <b>1992</b> , 455-457	0.5	1
6	Sub-nanosecond X-ray diffraction from laser-shocked crystals <b>1992</b> , 393-398		
5	PLASTICITY IN SHOCKED SINGLE CRYSTALS VIEWED BY PULSED X-RAY DIFFRACTION <b>1992</b> , 809-812		
4	Transient effects in laser-plasma X-ray spectrometers. <i>Laser and Particle Beams</i> , <b>1991</b> , 9, 569-577	0.9	1
3	Direct measurements of compressive and tensile strain during shock breakout by use of subnanosecond x-ray diffraction. <i>Journal of Applied Physics</i> , <b>1990</b> , 68, 4531-4534	2.5	35
2	Subnanosecond x-ray diffraction from laser-shocked crystals. <i>Physical Review B</i> , <b>1989</b> , 40, 5705-5714	3.3	97

1 Shock launching in silicon studied with use of pulsed x-ray diffraction. *Physical Review B*, **1987**, 35, 9391-9394 57