John K Webb

List of Publications by Year in descending order

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66343 51608 7,755 142 42 86 citations h-index g-index papers 142 142 142 2625 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	Addendum: Precision in high resolution absorption line modelling, analytic Voigt derivatives, and optimization methods. Monthly Notices of the Royal Astronomical Society, 2022, 511, 198-200.	4.4	3
2	Cosmology intertwined: A review of the particle physics, astrophysics, and cosmology associated with the cosmological tensions and anomalies. Journal of High Energy Astrophysics, 2022, 34, 49-211.	6.7	350
3	Avoiding Bias in Measurements of Fundamental Constants from High Resolution Quasar Spectra. Universe, 2022, 8, 266.	2.5	5
4	Artificial intelligence and quasar absorption system modelling; application to fundamental constants at high redshift. Monthly Notices of the Royal Astronomical Society, 2021, 504, 1787-1800.	4.4	11
5	Non-uniqueness in quasar absorption models and implications for measurements of the fine structure constant. Monthly Notices of the Royal Astronomical Society, 2021, 507, 27-42.	4.4	13
6	Getting the model right: an information criterion for spectroscopy. Monthly Notices of the Royal Astronomical Society, 2021, 501, 2268-2278.	4.4	9
7	Spectral shape corrections for SDSS BOSS quasars. Astronomy and Astrophysics, 2021, 655, A53.	5.1	3
8	Precision in high resolution absorption line modelling, analytic Voigt derivatives, and optimization methods. Monthly Notices of the Royal Astronomical Society, 2021, 508, 3620-3633.	4.4	7
9	Precision and consistency of astrocombs. Monthly Notices of the Royal Astronomical Society, 2020, 493, 3997-4011.	4.4	21
10	A new era of fine structure constant measurements at high redshift. Monthly Notices of the Royal Astronomical Society, 2020, 500, 1-21.	4.4	28
11	Four direct measurements of the fine-structure constant 13 billion years ago. Science Advances, 2020, 6, .	10.3	45
12	John D Barrow (1952–2020). Astronomy and Geophysics, 2020, 61, 6.11-6.12.	0.2	0
13	A far-UV survey of three hot, metal-polluted white dwarf stars: WD0455â^'282, WD0621â^'376, and WD2211â^'495. Monthly Notices of the Royal Astronomical Society, 2019, 487, 3470-3487.	4.4	7
14	A search for cosmological anisotropy using the Lyman alpha forest from SDSS quasar spectra. Monthly Notices of the Royal Astronomical Society, 2019, 489, 3966-3980.	4.4	3
15	Constraining the magnetic field on white dwarf surfaces; Zeeman effects and fine structure constant variation. Monthly Notices of the Royal Astronomical Society, 2019, 485, 5050-5058.	4.4	6
16	Origin of Metals around Galaxies. I. Catalogs of Metal-line Absorption Doublets from High-resolution Quasar Spectra. Astrophysical Journal, 2018, 862, 50.	4.5	4
17	The primordial deuterium abundance at zabsÂ=Â2.504 from a high signal-to-noise spectrum of Q1009+2956. Monthly Notices of the Royal Astronomical Society, 2018, 477, 5536-5553.	4.4	26
18	Modelling long-range wavelength distortions in quasar absorption echelle spectra. Monthly Notices of the Royal Astronomical Society, 2017, , .	4.4	11

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19	A precise deuterium abundance: remeasurement of the zÂ=Â3.572 absorption system towards the quasar PKS1937–101. Monthly Notices of the Royal Astronomical Society, 2017, 468, 3239-3250.	4.4	34
20	Probing the Gravitational Dependence of the Fine-Structure Constant from Observations of White Dwarf Stars. Universe, 2017, 3, 32.	2.5	24
21	Evaluating the New Automatic Method for the Analysis of Absorption Spectra Using Synthetic Spectra. Universe, 2017, 3, 34.	2.5	13
22	A new analysis of fine-structure constant measurements and modelling errors from quasar absorption lines. Monthly Notices of the Royal Astronomical Society, 2015, 454, 3082-3093.	4.4	18
23	A robust deuterium abundance; re-measurement of the zÂ=Â3.256 absorption system towards the quasar PKS 1937â^'101. Monthly Notices of the Royal Astronomical Society, 2015, 447, 2925-2936.	4.4	47
24	A FOURTH H I 21 cm ABSORPTION SYSTEM IN THE SIGHT LINE OF MG J0414+0534: A RECORD FOR INTERVENING ABSORBERS. Astrophysical Journal Letters, 2013, 772, L25.	8.3	7
25	Spatial variation in the fine-structure constant - new results from VLT/UVES. Monthly Notices of the Royal Astronomical Society, 2012, 422, 3370-3414.	4.4	217
26	Indications of a Spatial Variation of the Fine Structure Constant. Physical Review Letters, 2011, 107, 191101.	7.8	386
27	Measuring space-time variation of the fundamental constants with redshifted submillimetre transitions of neutral carbon. Astronomy and Astrophysics, 2011, 533, A55.	5.1	15
28	Redshifted H \hat{a} \in fi and OH absorption in radio galaxies and quasars. Monthly Notices of the Royal Astronomical Society, 2011, 413, 1165-1173.	4.4	34
29	On the absence of molecular absorption in high-redshift millimetre-band searches. Monthly Notices of the Royal Astronomical Society, 2011, 416, 2143-2153.	4.4	22
30	New constraint on cosmological variation of the proton-to-electron mass ratio from Q0528â^250. Monthly Notices of the Royal Astronomical Society, 2011, 417, 3010-3024.	4.4	53
31	A third H <scp>i</scp> 21-cm absorption system in the sight-line of MG J0414+0534: a redshift for Object X?. Monthly Notices of the Royal Astronomical Society: Letters, 2011, 413, L86-L90.	3.3	5
32	Localized Hâ€fi 21-cm absorption towards a double-lobed z= 0.24 radio galaxy. Monthly Notices of the Royal Astronomical Society: Letters, 2011, 414, L26-L30.	3.3	14
33	Is there further evidence for spatial variation of fundamental constants?. Physical Review D, 2011, 83, .	4.7	35
34	Atomic Transition Frequencies, Isotope Shifts, and Sensitivity to Variation of the Fine Structure Constant for Studies of Quasar Absorption Spectra. Thirty Years of Astronomical Discovery With UKIRT, 2011, , 9-16.	0.3	9
35	New searches for H i 21 cm in damped Lyman α absorption systems. Monthly Notices of the Royal Astronomical Society, 2010, 402, 35-45.	4.4	27
36	Keck constraints on a varying fine-structure constant: wavelength calibration errors. Proceedings of the International Astronomical Union, 2009, 5, 315-315.	0.0	O

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37	Markov Chain Monte Carlo methods applied to measuring the fine structure constant from quasar spectroscopy. Proceedings of the International Astronomical Union, 2009, 5, 318-318.	0.0	O
38	Revision of VLT/UVES constraints on a varying fine-structure constant. Monthly Notices of the Royal Astronomical Society, 2008, 384, 1053-1062.	4.4	104
39	The University of New South Wales Extrasolar Planet Search: a catalogue of variable stars from fields observed between 2004 and 2007. Monthly Notices of the Royal Astronomical Society, 2008, 385, 1749-1763.	4.4	18
40	A survey for redshifted molecular and atomic absorption lines - II. Associated Hâ€fi, OH and millimetre lines in the <i>z</i> ≳ 3 Parkes quarter-Jansky flat-spectrum sample. Monthly Notices of the Royal Astronomical Society, 2008, 391, 765-784.	4.4	59
41	Stringent Null Constraint on Cosmological Evolution of the Proton-to-Electron Mass Ratio. Physical Review Letters, 2008, 101, 251304.	7.8	96
42	Revisiting VLT/UVES Constraints on a Varying Fine-structure Constant., 2008, , 95-99.		3
43	Comment on "Limits on the Time Variation of the Electromagnetic Fine-Structure Constant in the Low Energy Limit from Absorption Lines in the Spectra of Distant Quasars― Physical Review Letters, 2007, 99, 239001.	7.8	84
44	Editorial: The Virtues of Deliberation. Information Technology and Libraries, 2007, 26, 3.	0.9	0
45	Editorial: Reflections on Forty. Information Technology and Libraries, 2007, 26, 3.	0.9	32
46	Editorial: Farewell and Thank You. Information Technology and Libraries, 2007, 26, 2.	0.9	0
47	Probing variations in fundamental constants with radio and optical quasar absorption-line observations. Monthly Notices of the Royal Astronomical Society, 2007, 374, 634-646.	4.4	47
48	The connection between metallicity and metal-line kinematics in (sub-)damped Lyl $$ t systems. Monthly Notices of the Royal Astronomical Society, 2007, 376, 673-681.	4.4	45
49	Selection of ThAr lines for wavelength calibration of echelle spectra and implications for variations in the fine-structure constant. Monthly Notices of the Royal Astronomical Society, 2007, 378, 221-230.	4.4	79
50	The first high-amplitude Scuti star in an eclipsing binary system. Monthly Notices of the Royal Astronomical Society, 2007, 382, 239-244.	4.4	23
51	Relationships between the Hâ€fi 21-cm line strength, Mgâ€fii equivalent width and metallicity in damped Lyman α absorption systems. Monthly Notices of the Royal Astronomical Society, 2007, 382, 1331-1341.	4.4	23
52	Detection of broad 21-cm absorption at $\langle i \rangle z \langle j \rangle$ abs = 0.656 in the complex sight-line towards 3C 336. Monthly Notices of the Royal Astronomical Society: Letters, 2007, 381, L6-L10.	3.3	24
53	H I and OH absorption in the lensing galaxy of MG J0414+0534. Monthly Notices of the Royal Astronomical Society: Letters, 2007, 382, L11-L15.	3.3	22
54	Editorial: A Confession, a Speculation, and a Farewell. Information Technology and Libraries, 2006, 25, 115.	0.9	0

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55	Editorial: LITA and ITAL: Forty and Still Counting. Information Technology and Libraries, 2006, 25, 51.	0.9	O
56	Editorial: I Keep My Eyes Wide Open All the Time. Information Technology and Libraries, 2006, 25, 3.	0.9	6
57	A new detached K7 dwarf eclipsing binary system. Monthly Notices of the Royal Astronomical Society, 2006, 370, 1529-1533.	4.4	21
58	The detectability of $H\hat{a} \in f$ i 21-cm absorption in damped Lyman \hat{l}_{\pm} systems. Monthly Notices of the Royal Astronomical Society, 2006, 371, 356-362.	4.4	34
59	A survey for redshifted molecular and atomic absorption lines - I. The Parkes half-Jansky flat-spectrum red quasar sample. Monthly Notices of the Royal Astronomical Society, 2006, 371, 431-443.	4.4	52
60	Deep Searches for High Redshift Molecular Absorption. Highlights of Astronomy, 2005, 13, 845-847.	0.0	0
61	Searching for Extrasolar Planets from UNSW. Proceedings of the International Astronomical Union, 2005, 1, 193-198.	0.0	0
62	Spin temperatures and covering factors for H $\hat{a} \in fi$ 21-cm absorption in damped Lyman \hat{l} ±systems. Monthly Notices of the Royal Astronomical Society, 2005, 356, 1509-1518.	4.4	47
63	The University of New South Wales Extrasolar Planet Search: methods and first results from a field centred on NGC 6633. Monthly Notices of the Royal Astronomical Society, 2005, 360, 703-717.	4.4	47
64	Hyperfine structure of the ground state in singly ionized manganese. Monthly Notices of the Royal Astronomical Society, 2005, 364, 705-711.	4.4	21
65	Inconstant Constants. Scientific American, 2005, 292, 56-63.	1.0	71
66	Editorial: First Have Something to Say. Information Technology and Libraries, 2005, 24, 3.	0.9	4
67	Editorial: Bottom Tech Trends. Information Technology and Libraries, 2005, 24, 98.	0.9	0
68	Editorial: Information Technology Dissonance. Information Technology and Libraries, 2005, 24, 156.	0.9	0
69	Limits on Variations in Fundamental Constants from 21-cm and Ultraviolet Quasar Absorption Lines. Physical Review Letters, 2005, 95, 041301.	7.8	68
70	Constraining Variationsin the Fine-Structure Constant, Quark Massesand the Strong Interaction. Lecture Notes in Physics, 2004, , 131-150.	0.7	96
71	Cosmological evolution of heavy-element and H2 abundances. Monthly Notices of the Royal Astronomical Society, 2004, 351, L24-L28.	4.4	22
72	Deuterium/hydrogen in a new Lyman limit absorption system atz= 3.256 towards PKS1937â^1009. Monthly Notices of the Royal Astronomical Society, 2004, 355, 1042-1052.	4.4	69

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73	Molecular fraction limits in damped Lyman \hat{l}_{\pm} absorption systems. Monthly Notices of the Royal Astronomical Society, 2004, 352, 563-570.	4.4	27
74	Microvariability and Long-Term Variability of Four Blazars. Astronomical Journal, 2004, 127, 17-23.	4.7	19
75	Does the fine structure constant vary? A third quasar absorption sample consistent with varying $\hat{l}\pm$. Astrophysics and Space Science, 2003, 283, 565-575.	1.4	56
76	Does the fine structure constant vary? A detailed investigation into systematic effects. Astrophysics and Space Science, 2003, 283, 577-582.	1.4	45
77	A 22-GHz search for molecular absorption at z \hat{A} 3 with the upgraded ATCA. Monthly Notices of the Royal Astronomical Society, 2003, 340, 139-142.	4.4	2
78	A search for high-redshift molecular absorption lines towards millimetre-loud, optically faint quasars. Monthly Notices of the Royal Astronomical Society, 2003, 342, 830-836.	4.4	12
79	The deuterium abundance in thez= 0.7 absorber towards QSO PG1718+4807. Monthly Notices of the Royal Astronomical Society, 2003, 345, 243-252.	4.4	9
80	Further evidence for a variable fine-structure constant from Keck/HIRES QSO absorption spectra. Monthly Notices of the Royal Astronomical Society, 2003, 345, 609-638.	4.4	441
81	Solutions to the tethered galaxy problem in an expanding universe and the observation of receding blueshifted objects. American Journal of Physics, 2003, 71, 358-364.	0.7	25
82	Are the laws of nature changing with time?. Physics World, 2003, 16, 33-38.	0.0	3
83	Does the Fine Structure Constant Vary? A Third Quasar Absorption Sample Consistent with Varying \hat{l}_\pm ., 2003, , 127-137.		1
84	A Catalogue of Damped Lyman Alpha Absorption Systems and Radio Flux Densities of the Background Quasars. Publications of the Astronomical Society of Australia, 2002, 19, 455-474.	3.4	29
85	A search for molecules in damped Lyman-alpha absorbers occulting millimetre-loud quasars. Astronomy and Astrophysics, 2002, 394, 763-768.	5.1	6
86	Accurate laboratory wavelengths of some ultraviolet lines of Cr, Zn and Ni relevant to time variations of the fine structure constant. Monthly Notices of the Royal Astronomical Society, 2002, 319, 163-167.	4.4	33
87	Further Evidence for Cosmological Evolution of the Fine Structure Constant. Physical Review Letters, 2001, 87, 091301.	7.8	663
88	Could We Detect O2 in the Atmosphere of a Transiting Extra-solar Earth-like Planet?. Publications of the Astronomical Society of Australia, 2001, 18, 252-258.	3.4	13
89	The Gaseous Extent of Galaxies and the Origin of Lyl± Absorption Systems. V. Optical and Nearâ€Infrared Photometry of Lyl±â€absorbing Galaxies atz < 1. Astrophysical Journal, 2001, 559, 654-674.	4.5	125

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91	Possible evidence for a variable fine-structure constant from QSO absorption lines: motivations, analysis and results. Monthly Notices of the Royal Astronomical Society, 2001, 327, 1208-1222.	4.4	290
92	Possible evidence for a variable fine-structure constant from QSO absorption lines: systematic errors. Monthly Notices of the Royal Astronomical Society, 2001, 327, 1223-1236.	4.4	107
93	Further constraints on variation of the fine-structure constant from alkali-doublet QSO absorption lines. Monthly Notices of the Royal Astronomical Society, 2001, 327, 1237-1243.	4.4	114
94	Improved constraints on possible variation of physical constants from H I 21-cm and molecular QSO absorption lines. Monthly Notices of the Royal Astronomical Society, 2001, 327, 1244-1248.	4.4	100
95	Collections and systems: a new organizational paradigm for collection development. Library Collections Acquisitions and Technical Services, 2001, 25, 461-468.	0.1	5
96	Relativistic effects in Ni II and the search for variation of the fine-structure constant. Physical Review A, 2001, 63, .	2.5	21
97	Relativistic Corrections in Atoms and Space-Time Variation of the Fine Structure Constant. Lecture Notes in Physics, 2001, , 564-575.	0.7	1
98	The Origin of CivAbsorption Systems at Redshiftsz< 1: Discovery of Extended CivEnvelopes around Galaxies. Astrophysical Journal, 2001, 556, 158-163.	4.5	141
99	Large-scale structure in the Lyman-Â forest-II. Analysis of a group of 10 QSOs. Monthly Notices of the Royal Astronomical Society, 2000, 311, 657-667.	4.4	17
100	A method for detecting gravitational waves coincident with gamma-ray bursts. Monthly Notices of the Royal Astronomical Society, 2000, 316, 657-664.	4.4	6
101	Constraints on the Unseen Galaxy Population from the Lyl $$ ± Forest. International Astronomical Union Colloquium, 1999, 171, 35-42.	0.1	1
102	Space-Time Variation of Physical Constants and Relativistic Corrections in Atoms. Physical Review Letters, 1999, 82, 888-891.	7.8	258
103	Calculations of the relativistic effects in many-electron atoms and space-time variation of fundamental constants. Physical Review A, 1999, 59, 230-237.	2.5	241
104	Search for Time Variation of the Fine Structure Constant. Physical Review Letters, 1999, 82, 884-887.	7.8	636
105	The Gaseous Extent of Galaxies and the Origin of Lyl± Absorption Systems. IV. Lyl± Absorbers Arising in a Galaxy Group. Astrophysical Journal, 1999, 523, 72-77.	4.5	8
106	Evidence of Structure in the Lyman-α Forest. Globular Clusters - Guides To Galaxies, 1999, , 234-235.	0.1	0
107	The Hubble Deep Field-South QSO. Globular Clusters - Guides To Galaxies, 1999, , 278-279.	0.1	0
108	Precise laboratory wavelengths of the Mg I and Mg II resonance transitions at 2853, 2803 and 2796 A. Monthly Notices of the Royal Astronomical Society, 1998, 300, 131-134.	4.4	40

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109	Large-scale structure in the Lyman-alpha forest: a new technique. Monthly Notices of the Royal Astronomical Society, 1998, 301, 787-796.	4.4	3
110	New limits on the possible variation of physical constants. Monthly Notices of the Royal Astronomical Society, 1998, 295, 457-462.	4.4	85
111	Large-scale structure in the Lyman-Â forest: a new technique. Monthly Notices of the Royal Astronomical Society, 1998, 301, 787-796.	4.4	2
112	The Gaseous Extent of Galaxies and the Origin of Lyl̃± Absorption Systems. III.HubbleSpaceTelescopeImaging of Lyl̃±â€absorbing Galaxies atz< 1. Astrophysical Journal, 1998, 498, 77-94.	4.5	137
113	Observations of QSO J2233â^'606 in the Southern Hubble Deep Field. Astrophysical Journal, 1998, 499, L135-L138.	4.5	12
114	A high deuterium abundance at redshift $z = 0.7$. Nature, 1997, 388, 250-252.	27.8	133
115	Damped Lyalpha Absorption Associated with an Early-Type Galaxy at Redshift z =0.16377 Astronomical Journal, 1997, 114, 1337.	4.7	36
116	The high-redshift deuterium abundance: the $z=3.086$ absorption complex towards Q 0420-388. Monthly Notices of the Royal Astronomical Society, 1996, 278, 506-518.	4.4	62
117	VLA Imaging of a Sample of Steep-Spectrum Radio Galaxies. Astrophysical Journal, Supplement Series, 1996, 107, 175.	7.7	12
118	The Gaseous Extent of Galaxies and the Origin of Lyl̂± Absorption Systems. II. Identification of a Group or Cluster of Lyl̂± Absorbing Galaxies at [ITAL]z[/ITAL] â‰^ 0.26. Astrophysical Journal, 1996, 456, .	4.5	22
119	Strong Clustering of High-Redshift Lyl± Forest Absorption Systems. Astrophysical Journal, 1996, 460, .	4.5	26
120	Extensive dark-matter haloes in low-luminosity galaxies revealed by quasar absorption lines. Nature, 1995, 376, 321-323.	27.8	19
121	The Red Bright Quasar Survey (RBQS). International Astronomical Union Colloquium, 1995, 148, 522-527.	0.1	2
122	The Gaseous Extent of Galaxies and the Origin of Lyl̂ \pm Absorption Systems. Globular Clusters - Guides To Galaxies, 1995, , 263-272.	0.1	3
123	The absorption spectra of Q1107+487 and Q1442+295. Astronomical Journal, 1995, 109, 1531.	4.7	4
124	The gaseous extent of galaxies and the origin of Lyman-alpha absorption systems: A survey of galaxies in the fields of Hubble Space Telescope spectroscopic target QSOs. Astrophysical Journal, 1995, 442, 538.	4.5	237
125	Is there deuterium in the Formula Complex in the Spectrum of Formula?. Monthly Notices of the Royal Astronomical Society, 1994, 268, L1-L4.	4.4	159
126	Optical and ultraviolet observations of 3C 279 during outburst. Astronomical Journal, 1994, 107, 904.	4.7	12

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127	The multifrequency spectral evolution of blazar 3C 345. Astrophysical Journal, 1994, 422, 570.	4.5	12
128	Evidence for structure in the H I column density distribution of QSO absorbers. Monthly Notices of the Royal Astronomical Society, 1993, 262, 499-505.	4.4	132
129	A re-analysis of the spectrum of QSO 2206 - 199. Monthly Notices of the Royal Astronomical Society, 1993, 260, 589-609.	4.4	30
130	The Gunn-Peterson effect and the H I column density distribution of Lyman alpha forest clouds at $z=4$. Monthly Notices of the Royal Astronomical Society, 1992, 255, 319-324.	4.4	30
131	The Lyman forest of 0014 + 813. Astrophysical Journal, 1992, 390, 387.	4.5	59
132	The effect of clustering on the equivalent width distribution of QSO Lyman-alpha clouds. Monthly Notices of the Royal Astronomical Society, 1991, 253, 207-211.	4.4	7
133	On measuring the deuterium abundance in QSO absorption systems. Monthly Notices of the Royal Astronomical Society, 1991, 250, 657-665.	4.4	23
134	A search for inhomogeneities in the Lyman \hat{l}_{\pm} forest. Monthly Notices of the Royal Astronomical Society, 1991, 250, 270-277.	4.4	12
135	High-resolution spectroscopy of Q1100 - 264 again. Astrophysical Journal, 1991, 371, 36.	4.5	56
136	The heavy element abundance in the $z=2.076$ absorption system towards the QSO 2206 $\hat{a}\in$ 199N. Monthly Notices of the Royal Astronomical Society, 1990, 242, 698-703.	4.4	12
137	Limits on heavy element abundances in QSO Ly absorption systems. Monthly Notices of the Royal Astronomical Society, 1989, 237, 635-652.	4.4	7
138	A walk in the Lyman-α forest. Nature, 1989, 338, 620-621.	27.8	1
139	High-redshift QSO absorbing clouds and the background ionizing source. Astrophysical Journal, 1987, 319, 709.	4.5	79
140	The remarkable broad absorption line QSO 0059-2735 with extensive Fe II absorption. Astrophysical Journal, 1987, 323, 263.	4.5	48
141	Artificial intelligence applied to the automatic analysis of absorption spectra. Objective measurement of the fine structure constant Monthly Notices of the Royal Astronomical Society, 0, , stx179.	4.4	24
142	Measuring the fine structure constant on a white dwarf surface; a detailed analysis of FeÂV absorption in G191-B2B. Monthly Notices of the Royal Astronomical Society, 0, , .	4.4	12