

# A S Baran

## List of Publications by Year in descending order

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108  
papers

2,777  
citations

147801

31  
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214800

47  
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108  
all docs

108  
docs citations

108  
times ranked

1614  
citing authors

#	ARTICLE	IF	CITATIONS
1	Discovery of 74 new bright ZZ Ceti stars in the first three years of <i>TESS</i>. Monthly Notices of the Royal Astronomical Society, 2022, 511, 1574-1590.	4.4	14
2	Filling the gap between synchronized and non-synchronized sdBs in short-period sdBV+dM binaries with TESS: TICâ€™%137608661, a new system with a well-defined rotational splitting. Monthly Notices of the Royal Astronomical Society, 2022, 511, 2201-2217.	4.4	5
3	Exotic shape symmetries around the fourfold octupole magic number $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML">\langle \text{mml:mrow}>\langle \text{mml:mi}>N</\text{mml:mi}>\langle \text{mml:mo}>=\langle \text{mml:mo}>2\langle \text{mml:mn}>136</\text{mml:mn}>\langle \text{mml:mo}>/\langle \text{mml:mi}>N</\text{mml:mi}>\langle \text{mml:mo}>^2</\text{mml:mo}>$ . Formulation of experimental identification criteria. Physical Review C, 2022, 105, .		
4	Pulsating hydrogen-deficient white dwarfs and pre-white dwarfs observed with TESS. Astronomy and Astrophysics, 2022, 659, A30.	5.1	7
5	Physical parameters of close binary systems: VIII. Monthly Notices of the Royal Astronomical Society, 2021, 501, 2897-2919.	4.4	17
6	Pulsating hydrogen-deficient white dwarfs and pre-white dwarfs observed with TESS. Astronomy and Astrophysics, 2021, 645, A117.	5.1	19
7	Space observations of AA Doradus provide consistent mass determinations. New HW-Vir systems observed with <i>TESS</i>. Monthly Notices of the Royal Astronomical Society, 2021, 503, 2157-2167.	4.4	5
8	A search for variable subdwarf B stars in <i>TESS</i> Full Frame Images â€™ II. Variable objects in the northern ecliptic hemisphere. Monthly Notices of the Royal Astronomical Society, 2021, 503, 3828-3847.	4.4	12
9	Exotic toroidal and superdeformed configurations in light atomic nuclei: Predictions using a mean-field Hamiltonian without parametric correlations. Physical Review C, 2021, 103, .	2.9	13
10	Asteroseismic analysis of variable hot subdwarf stars observed with TESS. Astronomy and Astrophysics, 2021, 651, A121.	5.1	9
11	Pulsating subdwarf B stars observed with <i>K2</i> during Campaign 7 and an examination of seismic group properties. Monthly Notices of the Royal Astronomical Society, 2021, 507, 4178-4195.	4.4	6
12	Evolutionary modelling of subdwarf B stars using $\langle \text{scp}>\text{mesa}</\text{scp}>$ with the predictive mixing and convective pre-mixing schemes. Monthly Notices of the Royal Astronomical Society, 2021, 503, 4646-4661.	4.4	19
13	Pulsating subdwarf B stars in the oldest open cluster NGCâ€™%6791. Monthly Notices of the Royal Astronomical Society, 2021, 509, 763-777.	4.4	3
14	A search for variable subdwarf B stars in TESS full frame images â€™ I. Variable objects in the southern ecliptic hemisphere. Monthly Notices of the Royal Astronomical Society, 2020, 499, 5508-5526.	4.4	19
15	Mode identification in three pulsating hot subdwarfs observed with TESS satellite. Monthly Notices of the Royal Astronomical Society, 2020, 495, 2844-2857.	4.4	15
16	K2 observations of the pulsating subdwarf B stars UYâ€™%Sex and V1405â€™%Ori. Monthly Notices of the Royal Astronomical Society, 2020, 492, 5202-5217.	4.4	8
17	About the existence of warm H-rich pulsating white dwarfs. Astronomy and Astrophysics, 2020, 633, A20.	5.1	11
18	TESS observations of pulsating subdwarf B stars: extraordinarily short-period gravity modes in CDâ€™%28â€™%1974. Monthly Notices of the Royal Astronomical Society, 2020, 493, 5162-5169.	4.4	6

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19	TESS first look at evolved compact pulsators. <i>Astronomy and Astrophysics</i> , 2020, 638, A82.	5.1	17
20	Alone but not lonely: Observational evidence that binary interaction is always required to form hot subdwarf stars. <i>Astronomy and Astrophysics</i> , 2020, 642, A180.	5.1	33
21	PHL 417: a zirconium-rich pulsating hot subdwarf (V366 Aquarid) discovered in <i>Kepler</i> data. <i>Monthly Notices of the Royal Astronomical Society</i> , 2020, 499, 3738-3748.	4.4	8
22	Detection of a Planet in 2M1938+4603 Revisited. <i>Research Notes of the AAS</i> , 2020, 4, 237.	0.7	1
23	High-degree gravity modes in the single sdB star HD 4539. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 489, 4791-4801.	4.4	11
24	K2 observations of the sdB+AdM/bd binaries PHL 457 and EQ Psc. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 489, 1556-1571.	4.4	19
25	GD358: Three Decades of Observations for the In-depth Asteroseismology of a DBV Star. <i>Astrophysical Journal</i> , 2019, 871, 13.	4.5	23
26	TESS first look at evolved compact pulsators. <i>Astronomy and Astrophysics</i> , 2019, 632, A42.	5.1	22
27	TESS first look at evolved compact pulsators. <i>Astronomy and Astrophysics</i> , 2019, 632, A90.	5.1	22
28	A Hot Subdwarf B Star Eclipsed by a Low-mass White Dwarf in TESS Data. <i>Research Notes of the AAS</i> , 2019, 3, 81.	0.7	3
29	Asteroseismic analysis of the pulsating subdwarf B star KIC 11558725: an sdB+WD system with divergent frequency multiplets and mode trapping observed by Kepler. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 474, 4709-4716.	4.4	12
30	Pulsations and eclipse-time analysis of HW Vir. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 481, 2721-2735.	4.4	18
31	Stochastic Modeling of Multiwavelength Variability of the Classical BL Lac Object OJ 287 on Timescales Ranging from Decades to Hours. <i>Astrophysical Journal</i> , 2018, 863, 175.	4.5	56
32	K2 Campaign 5 observations of pulsating subdwarf B stars: binaries and super-Nyquist frequencies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 474, 5186-5198.	4.4	11
33	A review of seismic observations of Kepler and K2-Observed sdBV stars. <i>Open Astronomy</i> , 2018, 27, 157-166.	0.6	18
34	EPIC 211779126: a rare hybrid pulsating subdwarf B star richly pulsating in both pressure and gravity modes. <i>Astronomy and Astrophysics</i> , 2017, 597, A95.	5.1	20
35	<i>Kepler</i> observations of the pulsating subdwarf B star KIC 2697388: the detection of converging frequency multiplets in the full data set. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 465, 1057-1065.	4.4	16
36	KIC 10001893: a pulsating sdB star with multiple trapped modes. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 472, 700-707.	4.4	10

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37	Discovery of a variable lead-rich hot subdwarf: UVO 0825+15. <i>Monthly Notices of the Royal Astronomical Society</i> , 2017, 465, 3101-3124.	4.4	40
38	Detection of stellar oscillations in HWVir. <i>Open Astronomy</i> , 2016, 26, .	0.6	0
39	A subsynchronously rotating pulsating subdwarf B star in a short-period binary with a white dwarf companion. <i>Astronomy and Astrophysics</i> , 2016, 585, A66.	5.1	13
40	A Search for QPOs in the Blazar OJ287: Preliminary Results from the 2015/2016 Observing Campaign. <i>Galaxies</i> , 2016, 4, 41.	3.0	13
41	Subsynchronous sdBV binaries. <i>Journal of Physics: Conference Series</i> , 2016, 728, 072015.	0.4	0
42	A pulsation analysis of <i>K2</i> observations of the subdwarf B star PG1142-037 during Campaign 1: A subsynchronously rotating ellipsoidal variable. <i>Monthly Notices of the Royal Astronomical Society</i> , 2016, 458, 1417-1426.	4.4	17
43	Detection of a planet in the sdB + M dwarf binary system 2Mâ€‰1938+4603. <i>Astronomy and Astrophysics</i> , 2015, 577, A146.	5.1	31
44	Exchange bias phenomenon in (Nd <sub>1-x</sub> Y <sub>x</sub> ) <sub>2</sub> /3Ca <sub>1</sub> /3MnO <sub>3</sub> (x = 0, 0.1) perovskites. <i>Low Temperature Physics</i> , 2015, 41, 1001-1005.	0.6	1
45	Analysis of Kepler B stars: rotational modulation and Maia variables. <i>Monthly Notices of the Royal Astronomical Society</i> , 2015, 451, 1445-1459.	4.4	55
46	A search for pulsating blue stars in the vicinity of NGC 6791 using Kepler LC data. <i>EPJ Web of Conferences</i> , 2015, 101, 06061.	0.3	0
47	KICâ€‰8302197: a non-rotating or low-inclination pulsating subdwarf B star observed with the <i>Kepler</i> spacecraft. <i>Astronomy and Astrophysics</i> , 2015, 573, A52.	5.1	14
48	A planet orbiting an sdB star and an M dwarf in 2M 1938+4603. <i>EPJ Web of Conferences</i> , 2015, 101, 06010.	0.3	1
49	Searching for planets around sdB stars. <i>Proceedings of the International Astronomical Union</i> , 2015, 11, 497-500.	0.0	1
50	A detection threshold in the amplitude spectra calculated from <i>Kepler</i> data obtained during K2 mission. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2015, 448, L16-L19.	3.3	72
51	THE DISCOVERY OF DIFFERENTIAL RADIAL ROTATION IN THE PULSATING SUBDWARF B STAR KIC 3527751. <i>Astrophysical Journal</i> , 2015, 805, 94.	4.5	30
52	KICâ€‰7668647: a 14 day beaming sdB+WD binary with a pulsating subdwarf. <i>Astronomy and Astrophysics</i> , 2014, 570, A129.	5.1	36
53	Analysis of the rich frequency spectrum of KICâ€‰10670103 revealing the most slowly rotating subdwarf B star in the Kepler field. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 440, 3809-3824.	4.4	39
54	Pairing-induced speedup of nuclear spontaneous fission. <i>Physical Review C</i> , 2014, 90, .	2.9	75

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55	<i>Kepler</i> detection of a new extreme planetary system orbiting the subdwarf-B pulsator KIC 10001893. <i>Astronomy and Astrophysics</i> , 2014, 570, A130.	5.1	37
56	Asteroseismology revealing trapped modes in KIC 10553698A. <i>Astronomy and Astrophysics</i> , 2014, 569, A15.	5.1	41
57	Stochastic pulsations in the subdwarf-B star KIC 2991276. <i>Astronomy and Astrophysics</i> , 2014, 564, L14.	5.1	29
58	Spontaneous fission modes and lifetimes of superheavy elements in the nuclear density functional theory. <i>Physical Review C</i> , 2013, 87, .	2.9	163
59	Three ways to solve the orbit of KIC 11558725: a 10-day beaming sdB+WD binary with a pulsating subdwarf. <i>Astronomy and Astrophysics</i> , 2012, 544, A1.	5.1	59
60	The discovery of two pulsating subdwarf B stars in NGC 6791 using <i>Kepler</i> data. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 427, 1245-1251.	4.4	24
61	EMPIRICAL DETERMINATION OF CONVECTION PARAMETERS IN WHITE DWARFS. I. WHOLE EARTH TELESCOPE OBSERVATIONS OF EC14012-1446. <i>Astrophysical Journal</i> , 2012, 751, 91.	4.5	32
62	Mt. Suhora M dwarf survey – Detection of eight short-period variable stars. <i>New Astronomy</i> , 2012, 17, 65-72.	1.8	0
63	Multiyear and multisite photometric campaigns on the bright high-amplitude pulsating subdwarf B star EC 01541-1409. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, , no-no.	4.4	4
64	Seismic evidence for non-synchronization in two close sdB+dM binaries from Kepler photometry. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 422, 1343-1351.	4.4	45
65	Orbital properties of an unusually low-mass sdB star in a close binary system with a white dwarf. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 424, 1752-1761.	4.4	24
66	A pulsation zoo in the hot subdwarf B star KIC 10139564 observed by Kepler. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 424, 2686-2700.	4.4	57
67	A compact system of small planets around a former red-giant star. <i>Nature</i> , 2011, 480, 496-499.	27.8	156
68	DISCOVERY OF A NEW AM CVn SYSTEM WITH THE <i>KEPLER</i> SATELLITE. <i>Astrophysical Journal</i> , 2011, 726, 92.	4.5	36
69	GALEX J201337.6+092801: THE LOWEST GRAVITY SUBDWARF B PULSATOR. <i>Astrophysical Journal Letters</i> , 2011, 731, L13.	8.3	3
70	RAT J0455+1305: a rare hybrid pulsating subdwarf B star. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 411, 776-780.	4.4	5
71	Whole Earth Telescope observations of the subdwarf B star KPD 1930+2752: a rich, short-period pulsator in a close binary. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 412, 371-390.	4.4	10
72	J08069+1527: a newly discovered high-amplitude, hybrid subdwarf B pulsator. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 413, 2838-2844.	4.4	9

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73	First Kepler results on compact pulsators - VI. Targets in the final half of the survey phase. Monthly Notices of the Royal Astronomical Society, 2011, 414, 2860-2870.	4.4	63
74	First Kepler results on compact pulsators - VIII. Mode identifications via period spacings in g-mode pulsating subdwarf B stars. Monthly Notices of the Royal Astronomical Society, 2011, 414, 2885-2892.	4.4	66
75	The pulsations of PG 1351+489. Monthly Notices of the Royal Astronomical Society, 2011, 415, 1220-1227.	4.4	13
76	First Kepler results on compact pulsators - VII. Pulsating subdwarf B stars detected in the second half of the survey phase. Monthly Notices of the Royal Astronomical Society, 2011, 414, 2871-2884.	4.4	22
77	BREAKING OF AXIAL AND REFLECTION SYMMETRIES IN SPONTANEOUS FISSION OF FERMIUM ISOTOPES. International Journal of Modern Physics E, 2011, 20, 552-556.	1.0	12
78	RAT0455+1305: another pulsating hybrid sdB star. Astrophysics and Space Science, 2010, 329, 193-197.	1.4	4
79	Constraining the degree of the dominant mode in QQ Vir. Astrophysics and Space Science, 2010, 329, 199-203.	1.4	3
80	Time-resolved high-resolution spectroscopy of the pulsating sdB star QQ Vir (PG1325+101). Astrophysics and Space Science, 2010, 329, 163-166.	1.4	2
81	First Kepler results on compact pulsators - III. Subdwarf B stars with V1093 Her and hybrid (DW Lyn) type pulsations. Monthly Notices of the Royal Astronomical Society, 2010, 409, 1496-1508.	4.4	42
82	First Kepler results on compact pulsators - V. Slowly pulsating subdwarf B stars in short-period binaries. Monthly Notices of the Royal Astronomical Society, 2010, 409, 1509-1517.	4.4	32
83	First Kepler results on compact pulsators - II. KIC 010139564, a new pulsating subdwarf B (V361 Hya) star with an additional low-frequency mode. Monthly Notices of the Royal Astronomical Society, 2010, 409, 1487-1495.	4.4	30
84	2006 WHOLE EARTH TELESCOPE OBSERVATIONS OF GD358: A NEW LOOK AT THE PROTOTYPE DBV. Astrophysical Journal, 2009, 693, 564-585.	4.5	35
85	Microscopic description of complex nuclear decay: Multimodal fission. Physical Review C, 2009, 80, .	2.9	96
86	The pulsating hot subdwarf Balloon 090100001: results of the 2005 multisite campaign. Monthly Notices of the Royal Astronomical Society, 2009, 392, 1092-1105.	4.4	33
87	Preliminary XCOV26 results for EC14012-1446. Journal of Physics: Conference Series, 2009, 172, 012061.	0.4	0
88	The pulsation modes of the pre-white dwarf PG 1159-035. Astronomy and Astrophysics, 2008, 477, 627-640.	5.1	46
89	COLLECTIVE INERTIA AND FISSION BARRIERS WITHIN THE SKYRME-HARTREE-FOCK THEORY. International Journal of Modern Physics E, 2007, 16, 443-451.	1.0	19
90	PARTICLE NUMBER CONSERVING APPROACH TO CORRELATIONS. International Journal of Modern Physics E, 2007, 16, 289-297.	1.0	12

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91	A giant planet orbiting the "extreme horizontal branch" star Vê%391 Pegasi. Nature, 2007, 449, 189-191.	27.8	217
92	Whole Earth Telescope Observations of the Pulsating Subdwarf B Star PG 0014+067. Astrophysical Journal, 2006, 646, 1230-1240.	4.5	22
93	Resolving the pulsations of the subdwarf B star KPD 2109 + 4401. Monthly Notices of the Royal Astronomical Society, 2006, 367, 179-185.	4.4	11
94	Ground-state properties of superheavy elements in macroscopic-microscopic models. European Physical Journal A, 2005, 25, 611-612.	2.5	4
95	Multicolour photometry of Balloon 090100001: linking the two classes of pulsating hot subdwarfs. Monthly Notices of the Royal Astronomical Society, 2005, 360, 737-747.	4.4	47
96	Observations of the pulsating subdwarf B star Feige 48: Constraints on evolution and companions. Monthly Notices of the Royal Astronomical Society, 2004, 348, 1164-1174.	4.4	41
97	$\delta$ -pairing forces and collective pairing vibrations. European Physical Journal A, 2004, 20, 413-418.	2.5	10
98	PG 1605+072 in Wet XCOV22: Support for the Multi Site Spectroscopic Telescope. Open Astronomy, 2003, 12, .	0.6	0
99	Physical parameters of components in close binary systems. Astronomy and Astrophysics, 2003, 412, 465-471.	5.1	39
100	Masses and radii of spherical nuclei calculated in various microscopic approaches. Physical Review C, 1999, 59, 704-713.	2.9	58
101	Neutron halos in heavy nuclei-relativistic mean field approach. Zeitschrift für Physik A, 1997, 357, 33-38.	0.9	11
102	Half lives of heaviest nuclei with Woods-Saxon potential. Zeitschrift für Physik A, Atomic Nuclei, 1988, 329, 161-167.	0.3	4
103	Spontaneous fission half-life-times of double-odd nuclei ( $Z \geq 97$ ). Zeitschrift für Physik A, 1985, 322, 695-700.	1.4	37
104	New estimates for the parameters of the modified oscillator potential of the rare earth nuclei. Zeitschrift für Physik A, 1980, 295, 299-301.	1.4	2
105	New modified oscillator potential for nuclei in the actinide region. Zeitschrift für Physik A, 1979, 291, 175-178.	1.4	1
106	Mode identification for Balloon 090100001 using combined multicolour photometry and spectroscopy. Monthly Notices of the Royal Astronomical Society, 0, 385, 255-260.	4.4	32
107	$K_2$ observations of pulsating subdwarf B stars: Analysis of EPIC 203948264 observed during Campaign 2. Monthly Notices of the Royal Astronomical Society, 0, , stx104.	4.4	8
108	Two $p$ -mode dominated subdwarf B pulsators in binaries with F-star companions observed with K2. Monthly Notices of the Royal Astronomical Society, 0, , .	4.4	12