

M A Baig

List of Publications by Year in descending order

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125
all docs

125
docs citations

125
times ranked

1145
citing authors

#	ARTICLE	IF	CITATIONS
1	Amelioration in the Detection of Chlorine Using Electric Field Assisted LIBS. Plasma Chemistry and Plasma Processing, 2020, 40, 809-818.	2.4	3
2	Spectrochemical analysis of dates available in Pakistan using laser induced breakdown spectroscopy (LIBS) and laser ablation time-of-flight mass spectrometer (LA-TOF-MS). Laser Physics, 2019, 29, 085602.	1.2	7
3	Analysis of lead and copper in soil samples by laser-induced breakdown spectroscopy under external magnetic field. Applied Physics B: Lasers and Optics, 2019, 125, 1.	2.2	26
4	On the compositional analysis of Coal using calibration free laser induced breakdown spectroscopy. Laser Physics, 2019, 29, 036101.	1.2	9
5	Spectroscopic investigations of the laser induced thallium plasma. Laser Physics, 2019, 29, 016004.	1.2	1
6	Spectroscopic Studies of Indium Plasma Produced by Fundamental (1,064 nm) and Second (532 nm) Harmonics of an Nd:YAG Laser. Journal of Russian Laser Research, 2018, 39, 37-45.	0.6	0
7	Substrate temperature effects on the structural, compositional, and electrical properties of VO ₂ thin films deposited by pulsed laser deposition. Surface and Interface Analysis, 2018, 50, 297-303.	1.8	23
8	On the perturbation of the 6snd 1,3D2 series by the 5d7d 1D2 state of barium. Laser Physics, 2018, 28, 015702.	1.2	0
9	Structural, compositional and hardness properties of hydrogenated amorphous carbon nitride thin films synthesized by dense plasma focus device. Surface and Interface Analysis, 2017, 49, 548-553.	1.8	11
10	Elemental Analysis of Black Salt by Laser-Induced Breakdown Spectroscopy and Inductively Coupled Plasma–Optical Emission Spectroscopy. Analytical Letters, 2016, 49, 2108-2118.	1.8	8
11	A Comparative Study of Calibration Free Methods for the Elemental Analysis by Laser Induced Breakdown Spectroscopy. Plasma Chemistry and Plasma Processing, 2016, 36, 1287-1299.	2.4	42
12	Spatial diagnostics of the laser-produced tin plasma in air. Laser Physics, 2016, 26, 076001.	1.2	18
13	Grain Size and Interface Dependence of Bias Stress Stability of n-Type Organic Field Effect Transistors. ACS Applied Materials & Interfaces, 2015, 7, 22380-22384.	8.0	14
14	Elemental Analysis of Stones Using Laser-Induced Breakdown Spectroscopy. IEEE Transactions on Plasma Science, 2015, 43, 2636-2641.	1.3	9
15	The role of metal contacts in the stability of n-type organic field effect transistors. Applied Physics A: Materials Science and Processing, 2014, 117, 2235-2240.	2.3	6
16	Three-step laser excitation of the odd-parity 5s5d 3D \hat{t}' 5snf 3F states of cadmium. European Physical Journal D, 2014, 68, 1.	1.3	5
17	Laser-based optical emission studies of barium plasma. Applied Physics B: Lasers and Optics, 2013, 110, 563-571.	2.2	14
18	Laser Based Optical Emission Studies of Zinc Oxide (ZnO) Plasma. Plasma Chemistry and Plasma Processing, 2013, 33, 1167-1178.	2.4	10

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19	Laser-induced breakdown spectroscopic study of ammonium nitrate plasma. Plasma Physics Reports, 2013, 39, 1019-1025.	0.9	4
20	Optical spectroscopic studies of titanium plasma produced by an Nd : YAG laser. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2013, 114, 7-14.	0.6	20
21	Diagnostic Study of an Fe-Ni Alloy Plasma Generated by the Fundamental (1064 nm) and Second (532 nm) Harmonics of an Nd: YAG Laser. Plasma Science and Technology, 2013, 15, 397-402.	1.5	1
22	Plasma diagnostic study of nickel alloy generated by fundamental and second harmonics of a ND: YAG laser., 2012, , .		0
23	Spatial diagnostics of the laser induced lithium fluoride plasma. Physics of Plasmas, 2012, 19, 063304.	1.9	29
24	A comparative study of single and double pulse of laser induced breakdown spectroscopy of silver. Physics of Plasmas, 2011, 18, .	1.9	73
25	Spectroscopic Studies of the Laser Produced Lead Plasma. Plasma Science and Technology, 2011, 13, 129-134.	1.5	21
26	Plasma Diagnostic Study of Alumina (Al_2O_3) Generated by the Fundamental and Second Harmonics of a Nd:YAG Laser. IEEE Transactions on Plasma Science, 2011, 39, 1861-1867.	1.3	17
27	Physical Review A, 2011, 84.		
28	On the Rydberg transitions and elemental compositions in the laser produced Al (6063) plasma. Physics of Plasmas, 2011, 18, 083303.	1.9	12
29	Oscillator strength measurements of the highly excited $4s4p^3P_1$ transitions of zinc. Journal of the Optical Society of America B: Optical Physics, 2010, 27, 402.	2.1	6
30	On the Optimization for Enhanced Dual-Pulse Laser-Induced Breakdown Spectroscopy. IEEE Transactions on Plasma Science, 2010, 38, 2052-2055.	1.3	31
31	Physical Review A, 2011, 84.	2.5	11
32	On-line monitoring of remediation process of chromium polluted soil using LIBS. Journal of Hazardous Materials, 2009, 163, 1265-1271.	12.4	68
33	Two-step laser excitation of the highly excited even-parity states of atomic mercury. European Physical Journal D, 2009, 53, 147-151.	1.3	3
34	Laser induced breakdown spectroscopy of zinc, cadmium and mercury plasma parameters produced by the 1064 nm, 532 nm, and 355 nm OF Nd:YAG laser., 2009, , .		2
35	Physical Review A, 2011, 84.	2.5	19
36	High resolution measurement and MQDT analysis of the $5d^96s^2$ autoionizing resonances of mercury. European Physical Journal D, 2008, 46, 437-442.	1.3	6

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37	Oscillator strengths of the $4s4p \ ^1P_1 \rightarrow 4snd \ ^1D_2$ transitions of neutral calcium. European Physical Journal D, 2008, 50, 1-8.	1.3	7
38	Spectroscopic characterization of laser ablation brass plasma. Journal of Applied Physics, 2008, 104, .	2.5	48
39	Spectroscopic studies of Ca plasma generated by the fundamental, second, and third harmonics of a Nd:YAG laser. Laser and Particle Beams, 2008, 26, 41-50.	1.0	57
40	Photoexcitation study of the $4s^2 \ ^1S_{1/2}$ state of atomic sodium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2008, 41, 115701.	1.5	10
41	Laser-optogalvanic studies of the $4p5ns$ and autoionizing resonances in krypton. Journal of Physics B: Atomic, Molecular and Optical Physics, 2008, 41, 035004.	1.5	2
42	Oscillator strength measurements of the $3s^2 \ ^1S_{1/2} \rightarrow 3s3p \ ^1P_1$ transition in sodium. Physical Review A, 2008, 78, .	2.5	10
43	Angular momentum dependence of photoionization cross section from the excited states of lithium isotopes. Physical Review A, 2008, 77, .	2.5	7
44	Plasma properties of laser-ablated strontium target. Journal of Applied Physics, 2008, 103, 083117.	2.5	41
45	DIAGNOSTICS OF COPPER PLASMA PRODUCED BY THE FUNDAMENTAL, SECOND AND THIRD HARMONICS OF A Nd:YAG LASER. International Journal of Modern Physics B, 2007, 21, 2697-2710.	2.0	12
46	Absolute photoionization cross section from the $6s6p \ ^1P_1$ excited states of barium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, 2307-2319.	1.5	17
47	Measurement of photoionization cross section from the $3s3p \ ^1P_1$ excited state of magnesium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, 2291-2305.	1.5	25
48	Experimental studies of the oscillator strengths of the $6s6p \ ^1P_1 \rightarrow 6snd \ ^1D_2$ Rydberg transitions in barium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, 4317-4331.	1.5	7
49	Multi-photon excitation spectra of the $3s \ ^n \ell$ ($\ell = 0, 1, 2$ and 3) Rydberg states of magnesium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, 3181-3196.	1.5	9
50	Measurement of the oscillator strength distribution in helium. Physical Review A, 2007, 76, .	2.5	11
51	The role of various binding materials for trace elemental analysis of powder samples using laser-induced breakdown spectroscopy. Talanta, 2007, 72, 642-649.	5.5	77
52	Measurement of oscillator strength distribution in the discrete and continuous spectrum of lithium. Physical Review A, 2007, 75, .	2.5	21
53	Line shape parameters study of the $6p7p \ (^1P_1, \ ^3D_1 \text{ and } \ ^3P_1)$: Autoionizing resonances in barium. European Physical Journal D, 2007, 41, 229-236.	1.3	7
54	Oscillator strength measurements of the $3p \ ^1P_1$ and Rydberg transitions of sodium. European Physical Journal D, 2007, 44, 9-16.	1.3	16

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55	Spectroscopic studies of laser induced aluminum plasma using fundamental, second and third harmonics of a Nd:YAG laser. European Physical Journal D, 2007, 44, 371-379.	1.3	81
56	Photoionization cross section and oscillator strength distribution in the near-threshold region of strontium. European Physical Journal D, 2007, 44, 439-447.	1.3	13
57	Measurement of electron density and temperature of a laser-induced zinc plasma. Journal Physics D: Applied Physics, 2006, 39, 1384-1391.	2.8	142
58	Photoionization cross section measurements of the $3p^1P_1, 3^3P_1$ excited states of helium in the near-threshold region. Physical Review A, 2006, 74, .	2.5	27
59	Laser isotope separation of lithium by two-step photoionization. Journal of Applied Physics, 2006, 100, 053111.	2.5	43
60	Simultaneous measurements of photoionization cross-sections of lithium isotopes from $3p^2P_{1/2}, 3/2$. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, 5025-5035.	1.5	26
61	Diagnostics of cadmium plasma produced by laser ablation. Journal of Applied Physics, 2006, 100, 073102.	2.5	43
62	Detection of heavy metals in Arabian crude oil residue using laser induced breakdown spectroscopy. Talanta, 2006, 69, 1072-1078.	5.5	114
63	Measurement of the photoionization cross-section of the $3p^2P_{1/2}, 3/2$ excited levels of sodium. European Physical Journal D, 2006, 37, 23-28.	1.3	23
64	Alternate technique for simultaneous measurement of photoionization cross-section of isotopes by TOF mass spectrometer. European Physical Journal D, 2006, 38, 277-283.	1.3	24
65	Photoionization cross-section measurements from the $2p, 3d$ and $3s$ excited states of lithium. European Physical Journal D, 2006, 40, 331-337.	1.3	19
66	Laser optogalvanic observations and MQDT analysis of $mp^5ndj=3$ autoionizing resonances in Ar, Kr and Xe. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, 4221-4229.	1.5	8
67	Two-step laser excitation of $4snd^3D_{1,2,3}$ and $4sns^3S_1$ states from the $4s4p^3P$ levels in zinc. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, 871-881.	1.5	12
68	Measurements of photoionization cross sections from the $5s5p^1P_1$ and $5s6s^1S_0$ excited states of strontium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, 1587-1596.	1.5	14
69	Measurements of oscillator strengths of the $2p^5(2P_{1/2})ndj=2, 3$ autoionizing resonances in neon. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, 2299-2313.	1.5	23
70	Optical emission studies of the mercury plasma generated by the fundamental, second and third harmonics of a Nd:YAG laser. Journal Physics D: Applied Physics, 2006, 39, 4377-4385.	2.8	38
71	Angular momentum dependence of photoionization cross sections from the excited states of lithium. Physical Review A, 2006, 74, .	2.5	19
72	Three-step laser excitation of the $6p^3/2ns, nd, ng$ autoionizing Rydberg levels via the $6p^5f^1/2[5/2]2$ level of lead. European Physical Journal D, 2005, 32, 271-276.	1.3	1

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73	The study of dominant physical processes in the time-resolved optogalvanic spectra of neon. European Physical Journal D, 2005, 36, 1-9.	1.3	11
74	Laser optogalvanic measurements and line-shape analysis of $5p57p$ and $5p54\epsilon\text{--}5f$ autoionizing resonances in xenon. Journal of Physics B: Atomic, Molecular and Optical Physics, 2005, 38, S65-S75.	1.5	13
75	Two-step laser spectroscopy of the highly excited even-parity levels of cadmium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2005, 38, 867-875.	1.5	8
76	On the first ionization potential of lithium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2005, 38, S77-S86.	1.5	20
77	Experimental and theoretical investigation of odd $5p51/2nl\hat{A}$ autoionizing resonances in xenon atoms: energy dependence of the reduced widths. Journal of Physics B: Atomic, Molecular and Optical Physics, 2004, 37, 1987-2009.	1.5	19
78	Two-step laser optogalvanic spectroscopy of the odd-parity Rydberg states of atomic mercury. European Physical Journal D, 2004, 28, 323-330.	1.3	11
79	High-resolution measurements and multichannel quantum defect analysis of the $Kr(4p5(2P1/2)nd',j=)$ Tj ETQq1 1 0.784314 rgBT /Overl 1549-1568.	1.5	27
80	Two-step laser excitation of the even parity $5p1/2np$ and $ndnf= 1,2$ Rydberg levels of neutral tin. Journal of Physics B: Atomic, Molecular and Optical Physics, 2001, 34, 2407-2417.	1.5	12
81	Two-step laser excitation of $5p3/2np,nf= 1$ and 2 autoionizing Rydberg levels of tin. Journal of Physics B: Atomic, Molecular and Optical Physics, 2000, 33, 3729-3741.	1.5	12
82	Laser optogalvanic spectroscopy of $5p5nfj= 1-5$ even-parity Rydberg levels of xenon. Journal of Physics B: Atomic, Molecular and Optical Physics, 2000, 33, 4647-4655.	1.5	11
83	Two-colour three-photon excitation of the $6snf1,3F3$ and $6snp1P1,3P1,2$ Rydberg levels of Yb I. Journal of Physics B: Atomic, Molecular and Optical Physics, 1999, 32, 953-965.	1.5	13
84	Three-colour four-photon resonant excitation of the even-parity autoionizing resonances in Yb I. Journal of Physics B: Atomic, Molecular and Optical Physics, 1999, 32, 4361-4371.	1.5	11
85	Two-step laser spectroscopy of the even-parity Rydberg levels of neutral tin. Journal of Physics B: Atomic, Molecular and Optical Physics, 1999, 32, 5669-5679.	1.5	13
86	Laser optogalvanic spectroscopic studies of xenon. Journal of Physics B: Atomic, Molecular and Optical Physics, 1998, 31, 4017-4028.	1.5	11
87	Three step excitation of the autoionizing Rydberg levels via levels of lead. Journal of Physics B: Atomic, Molecular and Optical Physics, 1997, 30, 3107-3116.	1.5	2
88	High-resolution photoabsorption spectrum of copper in the $3d$ subshell excitation region. Journal of Physics B: Atomic, Molecular and Optical Physics, 1997, 30, 5381-5399.	1.5	5
89	Three-step excitation of the $,nd,ng$ autoionizing Rydberg levels via the $6p6f$ level of lead. Journal of Physics B: Atomic, Molecular and Optical Physics, 1997, 30, 4183-4191.	1.5	1
90	Three-step laser excitation of the $,j= 1, 2, 3$ autoionizing Rydberg levels of lead. Journal of Physics B: Atomic, Molecular and Optical Physics, 1997, 30, 1179-1189.	1.5	6

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91	Two-photon laser-optogalvanic spectroscopy of the odd-parity Rydberg series of krypton. Journal of Physics B: Atomic, Molecular and Optical Physics, 1997, 30, 2155-2165.	1.5	18
92	Two-photon optogalvanic spectra of argon: odd parity Rydberg states. Journal of Physics B: Atomic, Molecular and Optical Physics, 1997, 30, 1151-1162.	1.5	23
93	Spectral line shapes in a thermionic diode detector. Measurement Science and Technology, 1996, 7, 1038-1041.	2.6	1
94	Inner-shell and double excitation spectrum of caesium involving 5p and 6s subshells. Journal of Physics B: Atomic, Molecular and Optical Physics, 1996, 29, 3871-3889.	1.5	2
95	Laser-induced dissociation and ionization of lithium vapour. Journal of Physics B: Atomic, Molecular and Optical Physics, 1996, 29, L381-L387.	1.5	6
96	Inner-shell and double-excitation spectrum of rubidium involving 4p and 5s subshells. Journal of Physics B: Atomic, Molecular and Optical Physics, 1995, 28, 1777-1792.	1.5	8
97	Two-step laser excitation of the even-parity Rydberg levels of lead. Journal of Physics B: Atomic, Molecular and Optical Physics, 1995, 28, 2875-2889.	1.5	14
98	Resonantly enhanced ns and nd Rydberg spectroscopy of sodium. Journal of Physics B: Atomic, Molecular and Optical Physics, 1995, 28, 1421-1432.	1.5	10
99	Two-photon optogalvanic Rydberg spectra of neon. Journal of Physics B: Atomic, Molecular and Optical Physics, 1995, 28, 2525-2538.	1.5	15
100	Inner shell and double excitation spectrum of sodium involving 2p and 3s subshells. Journal of Physics B: Atomic, Molecular and Optical Physics, 1994, 27, 389-404.	1.5	15
101	Two-colour three photon resonance excitation spectra of lithium. Journal of Physics B: Atomic, Molecular and Optical Physics, 1994, 27, L351-L357.	1.5	21
102	Autoionizing resonances in the 4d subshell excitation spectrum of cadmium. Journal of Physics B: Atomic, Molecular and Optical Physics, 1994, 27, 1693-1708.	1.5	10
103	High-resolution photoabsorption measurement and multichannel quantum-defect-theory analysis of the 2p53s(1P1)ns,ndautoionizing series of sodium. Physical Review A, 1994, 50, 2750-2753.	2.5	20
104	Measurement of oscillator strengths of the principal series of calcium. Physical Review A, 1994, 49, 3419-3425.	2.5	6
105	A high-resolution re-examination of the Yb I 5p-subshell absorption spectrum. Journal of Physics B: Atomic, Molecular and Optical Physics, 1993, 26, 2273-2288.	1.5	3
106	Inner shell and double excitation spectrum of ytterbium involving the 4f and 6s subshells. Journal of Physics B: Atomic, Molecular and Optical Physics, 1992, 25, 321-341.	1.5	17
107	The absorption spectrum of Tl in the vacuum ultraviolet: single and double excitations of 5d, 6s and 6p electrons. Journal of Physics B: Atomic, Molecular and Optical Physics, 1992, 25, 1719-1734.	1.5	6
108	Photoionization cross sections of doubly excited resonances in ytterbium. Journal of Physics B: Atomic, Molecular and Optical Physics, 1992, 25, 1393-1404.	1.5	11

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109	High-resolution studies of BaD molecule in the ultraviolet region. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1991, 13, 1021-1029.	0.4	1
110	High-resolution photoabsorption study of the 3d spectrum of chromium. Journal of Physics B: Atomic, Molecular and Optical Physics, 1990, 23, 3489-3509.	1.5	11
111	Many-body effects in the 4p spectrum of strontium. Journal of Physics B: Atomic, Molecular and Optical Physics, 1990, 23, 713-726.	1.5	20
112	Centrifugal barrier effects in the 3p spectrum of calcium. Journal of Physics B: Atomic and Molecular Physics, 1987, 20, L771-L775.	1.6	13
113	The high resolution subvalenced-shell absorption spectrum of zinc I. Zeitschrift für Physik D-Atoms Molecules and Clusters, 1987, 4, 313-328.	1.0	22
114	Autoionisation resonances in the photoabsorption spectrum of C ₂ H ₅ I. Journal of Physics B: Atomic and Molecular Physics, 1986, 19, L343-L347.	1.6	5
115	Rydberg structure within a broad resonance. Journal of Physics B: Atomic and Molecular Physics, 1985, 18, 3507-3527.	1.6	54
116	New high-resolution study of the 6s subshell spectrum of Tl I. Journal of Physics B: Atomic and Molecular Physics, 1985, 18, 3487-3497.	1.6	13
117	Centrifugal barrier effects in the high Rydberg states and autoionising resonances of neon. Journal of Physics B: Atomic and Molecular Physics, 1984, 17, 1785-1796.	1.6	47
118	The interchannel interaction between single excitation from 4f ¹⁴ and double excitation from 6s ² in Yb I. Journal of Physics B: Atomic and Molecular Physics, 1984, 17, L469-L474.	1.6	19
119	New high-resolution studies of the 5p spectrum of Ba. Journal of Physics B: Atomic and Molecular Physics, 1984, 17, 371-379.	1.6	21
120	A high-resolution study of the principal series of Sr I. Journal of Physics B: Atomic and Molecular Physics, 1984, 17, L271-L274.	1.6	14
121	Determination of partial photoionisation cross sections of methyl bromide in the first autoionisation range by use of spin polarisation photoelectron spectroscopy. Journal of Physics B: Atomic and Molecular Physics, 1983, 16, L1-L6.	1.6	8
122	High Rydberg transitions in the principal and intercombination series of mercury. Journal of Physics B: Atomic and Molecular Physics, 1983, 16, 1511-1523.	1.6	29
123	Molecular Rydberg transitions. Multichannel approaches to electronic states: CH ₃ I. Physical Review A, 1981, 24, 2485-2490.	2.5	29
124	Quasi-atomic Rydberg states of a complex molecule: CH ₃ I. Journal of Physics B: Atomic and Molecular Physics, 1981, 14, L25-L29.	1.6	45
125	Autoionisation in polyatomic molecules. Journal of Physics B: Atomic and Molecular Physics, 1981, 14, L67-L71.	1.6	13