

Gaetana Laricchia

List of Publications by Year in descending order

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#	ARTICLE	IF	CITATIONS
1	High-Resolved Electron Scattering from $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \text{ mathvariant="normal"} \rangle \text{H} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \text{ mathvariant="normal"} \rangle \text{O} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle \text{ near } 0\text{\AA}^\circ$. Physical Review Letters, 2019, 123, 033401.	7.8	8
2	Roadmap on photonic, electronic and atomic collision physics: II. Electron and antimatter interactions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2019, 52, 171002.	1.5	22
3	Differential positronium-formation cross sections for Ne, Ar, Kr, and Xe. Physical Review A, 2019, 100, .	2.5	4
4	A statistical description of scattering at the quantum level. Scientific Reports, 2018, 8, 15056.	3.3	5
5	Resonant scattering of positronium as a quasifree electron. Physical Review A, 2017, 95, .	2.5	11
6	High-Resolution Measurements of $\langle \text{mml:math} \text{ xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msup} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{e} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle + \langle \text{mml:mo} \rangle \langle \text{mml:mi} \text{ mathvariant="normal"} \rangle \text{H} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \text{ mathvariant="normal"} \rangle \text{O} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle \text{ Total Cross Section}$. Physical Review Letters, 2016, 117, 253401.	7.8	11
7	Magnetic field-free measurements of the total cross section for positrons scattering from helium and krypton. Journal of Physics B: Atomic, Molecular and Optical Physics, 2016, 49, 075202.	1.5	10
8	Absolute Differential Positronium-Formation Cross Sections. Physical Review Letters, 2015, 115, 033401.	7.8	18
9	Positronium Production and Scattering below Its Breakup Threshold. Physical Review Letters, 2015, 115, 223201.	7.8	34
10	Moderation and diffusion of positrons in tungsten meshes and foils. Journal of Applied Physics, 2015, 118, 105302.	2.5	8
11	Positronium beam production and scattering at low energies. Journal of Physics: Conference Series, 2015, 635, 052069.	0.4	1
12	An electrostatic positron beam for atomic and molecular collision experiments. Journal of Physics: Conference Series, 2015, 635, 052070.	0.4	0
13	An electrostatic brightness-enhanced timed positron beam for atomic collision experiments. Measurement Science and Technology, 2014, 25, 075013.	2.6	8
14	Ionization cross-sections for positron collisions with N2. European Physical Journal D, 2014, 68, 1.	1.3	6
15	Collimated positronium production from gases. European Physical Journal D, 2014, 68, 1.	1.3	11
16	The production of positronium and its resonant scattering. Journal of Physics: Conference Series, 2012, 388, 072031.	0.4	0
17	Positronium formation with excitation. Journal of Physics: Conference Series, 2012, 388, 072025.	0.4	1
18	Electron-like and resonant scattering of positronium. Journal of Physics: Conference Series, 2012, 388, 012018.	0.4	6

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19	Positronium Formation and Scattering from Biologically Relevant Molecules. Biological and Medical Physics Series, 2012, , 143-153.	0.4	2
20	Production of collimated positronium by positron scattering from CO ₂ , N ₂ and Xe. European Physical Journal D, 2012, 66, 1.	1.3	9
21	Differential ionization studies by positron impact. Journal of Physics: Conference Series, 2010, 199, 012020.	0.4	10
22	Positronium formation cross-sections for Xe, CO ₂ and N ₂ . Journal of Physics: Conference Series, 2010, 199, 012006.	0.4	12
23	Progress towards a positron reaction microscope. Journal of Physics: Conference Series, 2010, 199, 012025.	0.4	12
24	Fragmentation in positronium collisions with atoms. Journal of Physics: Conference Series, 2010, 199, 012001.	0.4	4
25	Resonant Scattering of Positronium in Collision with CO ₂ . Physical Review Letters, 2010, 105, 263401.	7.8	43
26	Simultaneous Ionization and Excitation of Molecules by Positron Impact. Physical Review Letters, 2010, 104, 073201.	7.8	15
27	Electron-Like Scattering of Positronium. Science, 2010, 330, 789-789.	12.6	94
28	Excited-State Positronium Formation from Helium, Argon, and Xenon. Physical Review Letters, 2009, 102, 133202.	7.8	38
29	Ionization in positron- and positronium- collisions with atoms and molecules. Journal of Physics: Conference Series, 2009, 194, 012036.	0.4	9
30	Ion production by positron impact on H ₂ O. Journal of Physics B: Atomic, Molecular and Optical Physics, 2009, 42, 065205.	1.5	11
31	Direct non-dissociative and dissociative ionization of CO ₂ by positron impact. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 466-470.	1.4	10
32	Fragmentation of positronium in collision with xenon. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 497-501.	1.4	18
33	Ionizing Collisions by Positrons and Positronium Impact on the Inert Atoms. Advances in Atomic, Molecular and Optical Physics, 2008, 56, 1-47.	2.3	54
34	Double-differential ionization cross-section for H ₂ O. Radiation Physics and Chemistry, 2007, 76, 431-435.	2.8	5
35	Positronium formation from CO ₂ and H ₂ O. Nuclear Instruments & Methods in Physics Research B, 2006, 247, 92-97.	1.4	14
36	Collisions involving positronium. Nuclear Instruments & Methods in Physics Research B, 2006, 247, 98-104.	1.4	16

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37	Positronium- and positronium-H ₂ O total cross sections. Journal of Physics B: Atomic, Molecular and Optical Physics, 2006, 39, 1337-1344.	1.5	33
38	On the XIIIth International Workshop on low-energy and Ps physics. Physica Scripta, 2006, 74, C37-C45.	2.5	3
39	Low energy positron-induced ionization of He and Ne. Nuclear Instruments & Methods in Physics Research B, 2005, 229, 51-54.	1.4	1
40	Production and scattering of a positronium beam. Nuclear Instruments & Methods in Physics Research B, 2005, 233, 88-94.	1.4	7
41	Positron-impact ionization and positronium formation from helium. Journal of Physics B: Atomic, Molecular and Optical Physics, 2005, 38, 3857-3866.	1.5	42
42	Energy-Sharing Asymmetries in Ionization by Positron Impact. Physical Review Letters, 2005, 95, 223202.	7.8	42
43	On the Energy Dependence of Annihilation Cross-Sections for Positrons in Collision with Atoms and Molecules. Physica Scripta, 2005, 71, C9-C13.	2.5	17
44	Differential ionization experiments on positronium-atom scattering. Nuclear Instruments & Methods in Physics Research B, 2004, 221, 56-59.	1.4	2
45	Positronium induced collisions. Nuclear Instruments & Methods in Physics Research B, 2004, 221, 60-68.	1.4	30
46	Investigation into the energy dependence of the annihilation cross-sections for Ne and Xe below the positronium formation threshold. Nuclear Instruments & Methods in Physics Research B, 2004, 221, 100-106.	1.4	10
47	Positronium formation from Ar and Xe. Nuclear Instruments & Methods in Physics Research B, 2004, 221, 107-111.	1.4	8
48	Positron and positronium interactions with atoms and molecules. Radiation Physics and Chemistry, 2003, 68, 21-31.	2.8	14
49	Fragmentation of Positronium in Collision with He Atoms. Physical Review Letters, 2002, 89, 173402.	7.8	59
50	Total positron-impact ionization and positronium formation from the noble gases. Journal of Physics B: Atomic, Molecular and Optical Physics, 2002, 35, 2525-2540.	1.5	80
51	Production of collimated positronium from molecular nitrogen. Journal of Physics B: Atomic, Molecular and Optical Physics, 2002, 35, 4819-4827.	1.5	21
52	Empirical scaling of positron- and electron-impact ionization cross sections. Journal of Physics B: Atomic, Molecular and Optical Physics, 2002, 35, 4059-4067.	1.5	18
53	From Positron to Positronium Scattering. , 2002, , 171-182.		0
54	Correlations between cross sections and threshold energies for positronium formation and direct ionization. Nuclear Instruments & Methods in Physics Research B, 2002, 192, 44-53.	1.4	3

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55	Positronium scattering from atoms and molecules. Nuclear Instruments & Methods in Physics Research B, 2002, 192, 67-73.	1.4	7
56	Electron ejection by positron impact ionization. Nuclear Instruments & Methods in Physics Research B, 2002, 192, 167-170.	1.4	2
57	Energy dependence of the total ionization and positronium formation cross-sections in e+Xe collisions. Nuclear Instruments & Methods in Physics Research B, 2002, 192, 215-219.	1.4	11
58	On the normalization of the positron-impact direct ionization cross-section in the noble gases. Nuclear Instruments & Methods in Physics Research B, 2002, 192, 220-224.	1.4	17
59	Triply differential ionization cross-section of H ₂ by 50 eV impact-energy positrons. Journal of Physics B: Atomic, Molecular and Optical Physics, 2001, 34, L219-L222.	1.5	39
60	Correlations between ionization cross sections and threshold energies in electron-, positron-, proton- and antiproton-atom collisions. Journal of Physics B: Atomic, Molecular and Optical Physics, 2001, 34, L271-L279.	1.5	6
61	A parallel-plate analyser with time focusing. Measurement Science and Technology, 2001, 12, 1875-1880.	2.6	10
62	On the formation of excited state positronium in vacuum by positron impact on untreated surfaces. Journal of Physics B: Atomic, Molecular and Optical Physics, 2001, 34, 3617-3628.	1.5	13
63	Correlations between Cross Sections and Threshold Energies for Positronium Formation and Direct Ionization. , 2001, , 303-322.		0
64	Rare gas solid moderator for Ps beam at UCL. Nuclear Instruments & Methods in Physics Research B, 2000, 171, 172-177.	1.4	25
65	Electron-capture-to-the-continuum by positron impact. Nuclear Instruments & Methods in Physics Research B, 2000, 171, 103-105.	1.4	7
66	The effect of forward-angle scattering on positronium-gas total cross sections. Journal of Physics B: Atomic, Molecular and Optical Physics, 2000, 33, 1149-1157.	1.5	46
67	Ionization and fragmentation of CCl ₂ F ₂ , CClF ₃ , CF ₄ , and CHF ₃ by positron impact. Physical Review A, 2000, 62, .	2.5	15
68	Correlations between cross sections and threshold energies for positronium formation. Journal of Physics B: Atomic, Molecular and Optical Physics, 2000, 33, L669-L676.	1.5	9
69	ATOMIC AND MOLECULAR PHYSICS WITH POSITRONS AND POSITRONIUM. , 2000, , 41-95.		5
70	Collisions involving antiparticles. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 1999, 357, 1259-1277.	3.4	9
71	Low-energy positron-argon elastic scattering at 30Å°. Journal of Physics B: Atomic, Molecular and Optical Physics, 1999, 32, L693-L696.	1.5	3
72	Double ionization of noble gases by positron impact. Physical Review A, 1999, 60, 2940-2943.	2.5	24

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73	Fragmentation and ionization of CH ₃ Cl by positron impact. Applied Surface Science, 1999, 149, 244-247.	6.1	1
74	Positron and Positronium Collisions. , 1999, , 245-249.		0
75	Positron impact ionisation of atoms. Nuclear Instruments & Methods in Physics Research B, 1998, 143, 94-99.	1.4	3
76	Electron ejection from ionising positron-atom collisions. Nuclear Instruments & Methods in Physics Research B, 1998, 143, 100-104.	1.4	11
77	Fragmentation and ionization of CH ₃ F by positron and electron impact. Nuclear Instruments & Methods in Physics Research B, 1998, 143, 112-120.	1.4	11
78	Positronium beam scattering from atoms and molecules. Nuclear Instruments & Methods in Physics Research B, 1998, 143, 155-161.	1.4	59
79	An electrostatic beam for positron-gas scattering measurements. Nuclear Instruments & Methods in Physics Research B, 1998, 143, 184-187.	1.4	2
80	On the annihilation of positrons in binary encounters with molecules. Nuclear Instruments & Methods in Physics Research B, 1998, 143, 135-139.	1.4	18
81	Triply Differential Study of Positron Impact Ionization of H ₂ . Physical Review Letters, 1998, 80, 5309-5312.	7.8	89
82	Ionization of rare gases by particle - antiparticle impact. Journal of Physics B: Atomic, Molecular and Optical Physics, 1997, 30, L581-L587.	1.5	38
83	Single and double ionization of neon, krypton and xenon by positron impact. Journal of Physics B: Atomic, Molecular and Optical Physics, 1997, 30, 3933-3949.	1.5	71
84	Threshold and channel-coupling effects in positron elastic scattering from noble gases. Journal of Physics B: Atomic, Molecular and Optical Physics, 1997, 30, 2221-2238.	1.5	28
85	Semiempirical Approach to Positron Annihilation in Molecules. Physical Review Letters, 1997, 79, 2241-2244.	7.8	48
86	Fragmentation of CH ₃ F by Positron Impact. Materials Science Forum, 1997, 255-257, 272-274.	0.3	3
87	Of Positron Scattering and Annihilation from Molecules. Materials Science Forum, 1997, 255-257, 228-232.	0.3	4
88	Double-differential cross sections for collisions of positrons with argon atoms. Journal of Physics B: Atomic, Molecular and Optical Physics, 1997, 30, L507-L512.	1.5	31
89	Antihydrogen production and precision experiments. Nuclear Physics, Section B, Proceedings Supplements, 1997, 56, 336-348.	0.4	23
90	Antihydrogen production and precision experiments. The ATHENA collaboration. , 1997, 109, 1-32.		12

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91	Positron scattering on atoms and molecules near the positronium threshold. Canadian Journal of Physics, 1996, 74, 427-433.	1.1	7
92	Positronium-beam production and positronium scattering from molecular hydrogen. Canadian Journal of Physics, 1996, 74, 518-520.	1.1	33
93	The ORELA positron-scattering program: Progress in the first energy-analysis experiments. Canadian Journal of Physics, 1996, 74, 497-500.	1.1	3
94	Single ionization by positron impact. Canadian Journal of Physics, 1996, 74, 367-372.	1.1	82
95	Of atomic collisions with positrons and positronium. Hyperfine Interactions, 1996, 100, 71-89.	0.5	14
96	Differential cross-section measurements in positron-argon collisions. Canadian Journal of Physics, 1996, 74, 505-508.	1.1	2
97	Positronium-Argon Scattering. Physical Review Letters, 1996, 76, 1595-1598.	7.8	84
98	Near-Threshold Ionization of He and H ₂ by Positron Impact. Physical Review Letters, 1996, 77, 1250-1253.	7.8	58
99	Positron - argon elastic, positronium formation and ionizing collisions at. Journal of Physics B: Atomic, Molecular and Optical Physics, 1996, 29, L667-L672.	1.5	9
100	Ps beam production and scattering from gaseous targets. Journal of Physics B: Atomic, Molecular and Optical Physics, 1996, 29, 5961-5968.	1.5	114
101	A gated positron beam incorporating a scattering cell and novel ion extractor. Applied Surface Science, 1995, 85, 118-123.	6.1	0
102	Positron and positronium collisions. Nuclear Instruments & Methods in Physics Research B, 1995, 99, 363-367.	1.4	24
103	Ionization of He, Ar and H ₂ by positron impact at intermediate energies. Journal of Physics B: Atomic, Molecular and Optical Physics, 1995, 28, 1331-1347.	1.5	28
104	Studies with Polarized Positrons. , 1995, , 169-176.		2
105	Threshold effects in positron scattering on noble gases. Physical Review A, 1994, 50, 3129-3133.	2.5	44
106	Positronium interactions in atomic physics. Hyperfine Interactions, 1994, 84, 355-363.	0.5	0
107	Differential ionization studies at forward angles. Hyperfine Interactions, 1994, 89, 129-131.	0.5	0
108	Near threshold effects in positron-atom (molecule) scattering. Hyperfine Interactions, 1994, 89, 209-218.	0.5	8

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109	Positronium beam technology. <i>Hyperfine Interactions</i> , 1994, 89, 243-249.	0.5	19
110	Crossed beam measurement of binding energies of positronium compounds: A proposal. <i>Hyperfine Interactions</i> , 1994, 89, 355-369.	0.5	2
111	Near-threshold ionization by positron impact. <i>Hyperfine Interactions</i> , 1994, 89, 389-394.	0.5	1
112	Doubly differential cross sections for collisions of 100 eV positrons and electrons with argon atoms. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1994, 27, 2409-2416.	1.5	40
113	Ionization of CO ₂ by positron impact. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 1993, 174, 255-257.	2.1	30
114	The production of low energy positrons and positronium. <i>Hyperfine Interactions</i> , 1993, 76, 95-113.	0.5	19
115	Antihydrogen synthesis by the reaction of antiprotons with excited state positronium atoms. <i>Hyperfine Interactions</i> , 1993, 76, 151-161.	0.5	56
116	Positronium formation from silver. <i>Hyperfine Interactions</i> , 1993, 76, 309-317.	0.5	3
117	Total ionization cross sections of He, H ₂ and Ar by positron impact. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1993, 26, L367-L372.	1.5	32
118	Ionization by positrons and electrons of Ar at zero degrees. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1993, 26, L575-L580.	1.5	41
119	Measurement of the positronium formation potential for Ag(100). <i>Journal of Physics Condensed Matter</i> , 1993, 5, 5209-5214.	1.8	8
120	Near threshold effects in positron-O ₂ scattering. <i>Physical Review Letters</i> , 1993, 70, 3229-3230.	7.8	37
121	Positron impact ionization of atomic hydrogen. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1993, 26, L483-L488.	1.5	96
122	Progress in positron scattering from atoms and molecules. <i>AIP Conference Proceedings</i> , 1993, , .	0.4	1
123	Crossed beam measurement of binding energies of positronium compounds : a preliminary study. <i>European Physical Journal Special Topics</i> , 1993, 03, 61-67.	0.2	3
124	Ejected-electron energy spectra in low energy positron-argon collisions. <i>Journal of Physics B: Atomic, Molecular and Optical Physics</i> , 1992, 25, L613-L619.	1.5	39
125	An Electrostatic System for Investigating Positron - Atom Collisions. <i>Materials Science Forum</i> , 1992, 105-110, 1919-1922.	0.3	3
126	Positronium Beam Production by Positron-Gas Interactions. <i>Solid State Phenomena</i> , 1992, 28-29, 347-364.	0.3	5

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127	New Results in Atomic Physics with Positrons. Materials Science Forum, 1992, 105-110, 349-358.	0.3	1
128	Implantation and Diffusion in Thin Films. Materials Science Forum, 1992, 105-110, 1431-1434.	0.3	4
129	A new timed slow positron beam. Measurement Science and Technology, 1991, 2, 175-177.	2.6	3
130	Thermal activation of positronium from thin Ag(100) films in backscattering and transmission geometries. Journal of Physics Condensed Matter, 1991, 3, 2849-2858.	1.8	16
131	Diagnostics of a positronium beam. Journal of Physics B: Atomic, Molecular and Optical Physics, 1991, 24, 4661-4670.	1.5	34
132	Positron impact phenomena. Journal of Physics B: Atomic, Molecular and Optical Physics, 1990, 23, 1045-1078.	1.5	77
133	The effect of laser annealing of thin W(100) films on positron transmission reemission properties. Journal of Applied Physics, 1990, 67, 575-577.	2.5	25
134	Double ionisation of noble gases by positron and electron impact. Journal of Physics B: Atomic, Molecular and Optical Physics, 1989, 22, 2779-2788.	1.5	36
135	Antihydrogen by positronium-antiproton collisions. Hyperfine Interactions, 1989, 44, 271-286.	0.5	28
136	Single-crystal nickel foils as positron transmission-mode moderators. Journal Physics D: Applied Physics, 1989, 22, 868-870.	2.8	16
137	Experimentation with thin single crystal W foils as slow positron transmission mode moderators. Applied Physics A: Solids and Surfaces, 1988, 47, 409-412.	1.4	33
138	Positron and electron impact double ionisation of helium. Journal of Physics B: Atomic, Molecular and Optical Physics, 1988, 21, L545-L549.	1.5	64
139	Observation of simultaneous positronium formation and excitation in positron-CO ₂ scattering. Journal of Physics B: Atomic, Molecular and Optical Physics, 1988, 21, L227-L232.	1.5	16
140	The production of a timed tunable beam of positronium atoms. Journal of Physics E: Scientific Instruments, 1988, 21, 886-888.	0.7	33
141	Antihydrogen Production by Positronium-Antiproton Collisions in an Ion Trap. Physica Scripta, 1988, T22, 248-255.	2.5	46
142	The production of collimated beams of o-Ps atoms using charge exchange in positron-gas collisions. Journal of Physics B: Atomic and Molecular Physics, 1987, 20, L99-L105.	1.6	35
143	Density dependence of positron annihilation and positronium formation in H ₂ gas at temperatures between 77 and 297 K. Journal of Physics B: Atomic and Molecular Physics, 1987, 20, 1865-1874.	1.6	23
144	On the Production of a Timed Positronium Beam by Positron-Gas Scattering. NATO ASI Series Series B: Physics, 1987, , 223-231.	0.2	3

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145	Low Energy Positron Transmission Measurement from Thin Single-Crystal W Foil. NATO ASI Series Series B: Physics, 1987, , 451-452.	0.2	1
146	Inelastic Positron Collisions in Gases. NATO ASI Series Series B: Physics, 1987, , 15-25.	0.2	1
147	Comment on the density and electric-field dependence of the positronium fraction in gaseous methane. Journal of Physics B: Atomic and Molecular Physics, 1986, 19, L111-L114.	1.6	5
148	Excited state positronium formation in low density gases. Physics Letters, Section A: General, Atomic and Solid State Physics, 1985, 109, 97-100.	2.1	37
149	Measurements of low-energy e^{+or-Ne} and e^{+Ar} total scattering cross sections. Journal of Physics B: Atomic and Molecular Physics, 1984, 17, 4945-4951.	1.6	35
150	Experimental aspects of ionization studies by positron and positronium impact. , 0, , 116-136.		2