Eric R Scerri

List of Publications by Year
in descending order

184	1,581	361413	414414
papers	citations	20 h-index	32 g-index

198	198	198	485
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Prediction and the periodic table. Studies in History and Philosophy of Science Part A, 2001, 32, 407-452.	1.2	110
2	Have Orbitals Really Been Observed?. Journal of Chemical Education, 2000, 77, 1492.	2.3	90
3	THE CASE FOR THE PHILOSOPHY OF CHEMISTRY. SynthÃˆse, 1997, 111, 213-232.	1.1	86
4	A Tale of Seven Elements. , 2013, , .		65
5	Philosophical Confusion in Chemical Education Research. Journal of Chemical Education, 2003, 80, 468.	2.3	55
6	The Electronic Configuration Model, Quantum Mechanics and Reduction. British Journal for the Philosophy of Science, 1991, 42, 309-325.	2.3	51
7	The Evolution of the Periodic System. Scientific American, 1998, 279, 78-83.	1.0	44
8	Has the Periodic Table Been Successfully Axiomatized?. Erkenntnis, 1997, 47, 229-243.	0.9	38
9	Philosophy of Chemistryâ€"A New Interdisciplinary Field?. Journal of Chemical Education, 2000, 77, 522.	2.3	38
10	The Role of Triads in the Evolution of the Periodic Table: Past and Present. Journal of Chemical Education, 2008, 85, 585.	2.3	38
11	Chemistry, spectroscopy, and the question of reduction. Journal of Chemical Education, 1991, 68, 122.	2.3	37
12	Has Chemistry Been at Least Approximately Reduced to Quantum Mechanics?. PSA Proceedings of the Biennial Meeting of the Philosophy of Science Association, 1994, 1994, 160-170.	0.1	36
13	The Periodic Table. , 2019, , .		36
14	Prediction of the nature of hafnium from chemistry, Bohr's theory and quantum theory. Annals of Science, 1994, 51, 137-150.	0.4	35
15	Title is missing!. Science and Education, 2000, 9, 405-425.	2.7	35
16	Just how ab initio is ab initio quantum chemistry?. Foundations of Chemistry, 2004, 6, 93-116.	1.1	35
17	Why the 4s Orbital Is Occupied before the 3d. Journal of Chemical Education, 1996, 73, 498.	2.3	34
18	The dual sense of the term â€œelement,â€•attempts to derive the Madelung rule, and the optimal form of the periodic table, if any. International Journal of Quantum Chemistry, 2009, 109, 959-971.	2.0	31

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19	How Good Is the Quantum Mechanical Explanation of the Periodic System?. Journal of Chemical Education, 1998, 75, 1384.	2.3	29
20	The Recently Claimed Observation of Atomic Orbitals and Some Related Philosophical Issues. Philosophy of Science, 2001, 68, S76-S88.	1.0	28
21	A critique of Weisbergâ€™s view on the periodic table and some speculations on the nature of classifications. Foundations of Chemistry, 2012, 14, 275-284.	1.1	27
22	Popper's naturalized approach to the reduction of chemistry. International Studies in the Philosophy of Science, 1998, 12, 33-44.	0.2	24
23	Top-down causation regarding the chemistryâ€“physics interface: a sceptical view. Interface Focus, 2012, 2, 20-25.	3.0	24
24	Can quantum ideas explain chemistryâ€™s greatest icon?. Nature, 2019, 565, 557-559.	27.8	22
25	Transition metal configurations and limitations of the orbital approximation. Journal of Chemical Education, 1989, 66, 481.	2.3	20
26	Recent attempts to change the periodic table. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190300.	3.4	19
27	THE NEW PHILOSOPHY OF CHEMISTRY AND ITS RELEVANCE TO CHEMICAL EDUCATION. Chemistry Education Research and Practice, 2001, 2, 165-170.	2.5	17
28	What is an element? What is the periodic table? And what does quantum mechanics contribute to the question?. Foundations of Chemistry, 2012, 14, 69-81.	1.1	15
29	Reduction and Emergence in Chemistryâ€”Two Recent Approaches. Philosophy of Science, 2007, 74, 920-931.	1.0	14
30	Explaining the periodic table, and the role of chemical triads. Foundations of Chemistry, 2010, 12, 69-83.	1.1	14
31	The discovery of the periodic table as a case of simultaneous discovery. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2015, 373, 20140172.	3.4	14
32	Which Elements Belong in Group 3?. Journal of Chemical Education, 2009, 86, 1188.	2.3	13
33	Editorial 37. Foundations of Chemistry, 2011, 13, 1-7.	1.1	13
34	Provisional Report on Discussions on Group 3 of The Periodic Table. Chemistry International, 2021, 43, 31-34.	0.3	13
35	The Past and Future of the Periodic Table. American Scientist, 2008, 96, 52.	0.1	13
36	The Nature of Chemical Knowledge and Chemical Education. , 2002, , 7-27.		12

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37	Happy 150th Birthday to the Periodic Table. Chemistry - A European Journal, 2019, 25, 7410-7415.	3.3	12
38	The Periodic Table and the Electron. , 2009, , 35-42.		12
39	Eastern mysticism and the alleged parallels with physics. American Journal of Physics, 1989, 57, 687-692.	0.7	11
40	Ordinal Explanation of the Periodic System of Chemical Elements. International Journal of Uncertainty, Fuzziness and Knowlege-Based Systems, 1998, 06, 387-399.	1.9	10
41	On the continuity of reference of the elements: a response to Hendry. Studies in History and Philosophy of Science Part A, 2006, 37, 308-321.	1.2	10
42	Cracks in the Periodic Table. Scientific American, 2013, 308, 68-73.	1.0	10
43	Five ideas in chemical education that must die. Foundations of Chemistry, 2019, 21, 61-69.	1.1	10
44	Looking Backwards and Forwards at the Development of the Periodic Table. Chemistry International, 2019, 41, 16-20.	0.3	10
45	Correspondence and Reduction in Chemistry. Boston Studies in the Philosophy and History of Science, 1993, , 45-64.	0.9	10
46	Have Orbitals Really Been Observed?. Journal of Chemical Education, 2002, 79, 310.	2.3	9
47	Response to Barnesâ€™s critique of Scerri and Worrall. Studies in History and Philosophy of Science Part A, 2005, 36, 813-816.	1.2	9
48	Recognizing rhenium. Nature Chemistry, 2010, 2, 598-598.	13.6	9
49	The exclusion principle, chemistry and hidden variables. SynthÃˆse, 1995, 102, 165-169.	1.1	8
50	Response to Needham. International Studies in the Philosophy of Science, 1999, 13, 185-192.	0.2	7
51	Constructivism, Relativism, and Chemical Education. Annals of the New York Academy of Sciences, 2003, 988, 359-369.	3.8	7
52	A revisionist history of atomism. Metascience, 2010, 19, 349-371.	0.3	7
53	The Quantum Mechanical Explanation of the Periodic System (author's reply). Journal of Chemical Education, 1999, 76, 1189.	2.3	6
54	Commentary on Allen & Kinghtâ€™s Response to the LÃ¶wdin Challenge. Foundations of Chemistry, 2006, 8, 285-292.	1.1	6

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55	Normative and Descriptive Philosophy of Science and the Role of Chemistry. , 2006, , 119-128.		6
56	Chemistry goes abstract. Nature Chemistry, 2009, 1, 679-680.	13.6	6
57	Hasok Chang on the nature of acids. Foundations of Chemistry, 2022, 24, 389-404.	1.1	6
58	Response to Vollmerâ€™s Review of Minds and Molecules. Philosophy of Science, 2003, 70, 391-398.	1.0	5
59	Another four bricks in the wall. Nature Chemistry, 2016, 8, 283-288.	13.6	5
60	Causation, electronic configurations and the periodic table. SynthÃˆse, 2020, 198, 9709.	1.1	5
61	The Periodic Table: The Ultimate Paper Tool in Chemistry. , 2001, , 163-177.		5
62	Bibilography of Secondary Sources on the Periodic System of the Chemical Elements. Foundations of Chemistry, 2001, 3, 183-195.	1.1	4
63	The Periodic Table. , 2012, , 329-338.		4
64	In Defense of Quantum Numbers. Journal of Chemical Education, 1999, 76, 608.	2.3	3
65	Editorial 4. Foundations of Chemistry, 2000, 2, 1-4.	1.1	3
66	Editorial 13. Foundations of Chemistry, 2003, 5, 1-6.	1.1	3
67	Editorial 21. Foundations of Chemistry, 2005, 7, 199-202.	1.1	3
68	The Gulf between chemistry and philosophy of chemistry, then and now. Structural Chemistry, 2017, 28, 1599-1605.	2.0	3
69	Editorial 58. Foundations of Chemistry, 2018, 20, 1-2.	1.1	3
70	Lowdinâ€™s Remarks on the Aufbau Principle and a Philosopherâ€™s View of AB Initio Quantum Chemistry. , 2003, , 1349-1368.		3
71	What Elements Belong in Group 3 of the Periodic Table?. , 2018, , .		3
72	On the nature of chemistry. Educacion Quimica, 2018, 10, 74.	0.1	3

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73	The electronic periodic chart of the elements. Journal of Chemical Education, 1991, 68, 712.	2.3	2
74	Configurational energy and bond polarity. The Journal of Physical Chemistry, 1993, 97, 5786-5786.	2.9	2
75	A Critique of Atkins' Periodic Kindom and Some Writings on Electronic Structure. Foundations of Chemistry, 1999, 1, 295-303.	1.1	2
76	Philosophical Confusion in Chemical Education Research: Constructivism and Chemical Education (the author replies). Journal of Chemical Education, 2004, 81, 194.	2.3	2
77	Principles and Parameters in Physics and Chemistry. Philosophy of Science, 2004, 71, 1082-1094.	1.0	2
78	Finding francium. Nature Chemistry, 2009, 1, 670-670.	13.6	2
79	Editorial 40. Foundations of Chemistry, 2012, 14, 1-2.	1.1	2
80	The periodic table and the turn to practice. Studies in History and Philosophy of Science Part A, 2020, 79, 87-93.	1.2	2
81	Master of Missing Elements. American Scientist, 2014, 102, 358.	0.1	2
82	On Chemical Natural Kinds. Journal for General Philosophy of Science, 2020, 51, 427-445.	1.4	2
83	Demystification at What Cost? (the authors reply). Journal of Chemical Education, 1997, 74, 480.	2.3	1
84	Editorial 2. Foundations of Chemistry, 1999, 1, 107-109.	1.1	1
85	Editorial 1. Foundations of Chemistry, 1999, 1, 1-5.	1.1	1
86	Editorial 8 â€“ Special Issue on the Periodic System of the Elements. Foundations of Chemistry, 2001, 3, 97-104.	1.1	1
87	Editorial 11. Foundations of Chemistry, 2002, 4, 93-96.	1.1	1
88	Editorial 14. Foundations of Chemistry, 2003, 5, 107-111.	1.1	1
89	Editorial 20. Foundations of Chemistry, 2005, 7, 119-123.	1.1	1
90	Editorial 23. Foundations of Chemistry, 2006, 8, 93-95.	1.1	1

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91	Editorial 26. Foundations of Chemistry, 2007, 9, 115-117.	1.1	1
92	Tales of technetium. Nature Chemistry, 2009, 1, 332-332.	13.6	1
93	Response to â€œThe Role of Triadsâ€• Journal of Chemical Education, 2009, 86, 1185.	2.3	1
94	Editorial 34. Foundations of Chemistry, 2010, 12, 1-3.	1.1	1
95	Some comments on the views of Niaz, Rodriguez and Brito on Mendeleevâ€™s periodic system. Educacion Quimica, 2013, 24, 278-284.	0.1	1
96	Editorial 49. Foundations of Chemistry, 2015, 17, 1-3.	1.1	1
97	Editorial 55. Foundations of Chemistry, 2017, 19, 1-1.	1.1	1
98	The Impact of Twentieth-Century Physics on the Periodic Table and Some Remaining Questions in the Twenty-First Century. Perspectives on the History of Chemistry, 2021, , 409-423.	0.1	1
99	Eric R. Scerri. The Periodic Table: Its Story and Its Significance. Oxford: Oxford University Press, 2007. xxii, 346 pages. ISBN-13: 978-0-19-530573-9. Knowledge Organization, 2008, 35, 251-255.	0.2	1
100	Some Aspects of the Metaphysics of Chemistry and the Nature of the Elements. , 2008, , 168-186.		1
101	The Dual Sense of the Term "Element," Attempts to Derive the Madelung Rule, and the Optimal Form of the Periodic Table, If Any. , 2009, , 131-143.		1
102	Various forms of the periodic table including the left-step table, the regularization of atomic number triads and first-member anomalies. ChemTexts, 2022, 8, 1.	1.9	1
103	In praise of triads. Foundations of Chemistry, 0, , .	1.1	1
104	Reductionist physics. Physics Education, 1990, 25, 138-139.	0.5	0
105	Aufbau mnemonics. Journal of Chemical Education, 1991, 68, 445.	2.3	0
106	Further Aufbau Nonsense. Journal of Chemical Education, 1994, 71, 270.	2.3	0
107	Interdisciplinary research at the Beckman institutes. Interdisciplinary Science Reviews, 1997, 22, 131-137.	1.4	0
108	Editorial 3. Foundations of Chemistry, 1999, 1, 221-223.	1.1	0

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109	Editorial 5. Foundations of Chemistry, 2000, 2, 95-98.	1.1	0
110	Editorial 7. Foundations of Chemistry, 2001, 3, 1-5.	1.1	0
111	Editorial 9. Foundations of Chemistry, 2001, 3, 197-199.	1.1	0
112	Editorial 10. Foundations of Chemistry, 2002, 4, 1-4.	1.1	0
113	Editorial 12. Foundations of Chemistry, 2002, 4, 179-182.	1.1	0
114	Editorial 15. Foundations of Chemistry, 2003, 5, 185-188.	1.1	0
115	HAFNIUM. Chemical & Engineering News, 2003, 81, 138.	0.1	0
116	Editorial 16. Foundations of Chemistry, 2004, 6, 1-2.	1.1	0
117	Editorial 17. Foundations of Chemistry, 2004, 6, 135-136.	1.1	0
118	Editorial 18. Foundations of Chemistry, 2004, 6, 199-201.	1.1	0
119	Philosophical Confusion in Chemical Education Research: Does Any of This Matter? (the author) Tj ETQq1 1 0.784314 rgBT /Overlock	2.3	0
120	Editorial 19 Special Issue on Philosophical Problems of Chemical Kinds. Foundations of Chemistry, 2005, 7, 1-4.	1.1	0
121	Editorial 22. Foundations of Chemistry, 2006, 8, 1-2.	1.1	0
122	Editorial 24. Foundations of Chemistry, 2006, 8, 221-223.	1.1	0
123	Philosophy of Chemistry, Reduction, Emergence, and Chemical Education. ACS Symposium Series, 2007, , 59-72.	0.5	0
124	Editorial 25. Foundations of Chemistry, 2007, 9, 1-1.	1.1	0
125	Editorial 27. Foundations of Chemistry, 2007, 9, 219-220.	1.1	0
126	Editorial 28. Foundations of Chemistry, 2008, 10, 1-2.	1.1	0

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127	Editorial 29. Foundations of Chemistry, 2008, 10, 77-78.	1.1	0
128	Editorial 30. Foundations of Chemistry, 2008, 10, 143-143.	1.1	0
129	Prediction and the Periodic Table. , 2009, , 45-90.		0
130	Editorial 31. Foundations of Chemistry, 2009, 11, 1-2.	1.1	0
131	Editorial 32. Foundations of Chemistry, 2009, 11, 61-62.	1.1	0
132	Editorial 33. Foundations of Chemistry, 2009, 11, 131-133.	1.1	0
133	Editorial 35. Foundations of Chemistry, 2010, 12, 95-96.	1.1	0
134	Editorial 36. Foundations of Chemistry, 2010, 12, 167-169.	1.1	0
135	Elementary interest. New Scientist, 2011, 211, 30-31.	0.0	0
136	Editorial 38. Foundations of Chemistry, 2011, 13, 85-86.	1.1	0
137	Editorial 39. Foundations of Chemistry, 2011, 13, 171-172.	1.1	0
138	Editorial 42. Foundations of Chemistry, 2012, 14, 189-190.	1.1	0
139	Are you really a realist?. New Scientist, 2012, 216, 30-31.	0.0	0
140	Editorial 41. Foundations of Chemistry, 2012, 14, 107-107.	1.1	0
141	Editorial 44. Foundations of Chemistry, 2013, 15, 123-123.	1.1	0
142	Editorial 43. Foundations of Chemistry, 2013, 15, 1-2.	1.1	0
143	Editorial 45. Foundations of Chemistry, 2013, 15, 243-243.	1.1	0
144	On the Naming and Symbols for Elements 115 and 112. Chemistry International, 2014, 36, .	0.3	0

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145	Editorial 48. Foundations of Chemistry, 2014, 16, 175-175.	1.1	0
146	Editorial 46. Foundations of Chemistry, 2014, 16, 1-2.	1.1	0
147	Editorial 47. Foundations of Chemistry, 2014, 16, 85-86.	1.1	0
148	Editorial 50. Foundations of Chemistry, 2015, 17, 91-92.	1.1	0
149	Editorial 51. Foundations of Chemistry, 2015, 17, 181-181.	1.1	0
150	Editorial 53. Foundations of Chemistry, 2016, 18, 87-87.	1.1	0
151	Editorial 54. Foundations of Chemistry, 2016, 18, 177-178.	1.1	0
152	Editorial 52. Foundations of Chemistry, 2016, 18, 1-2.	1.1	0
153	Editorial 56. Foundations of Chemistry, 2017, 19, 95-96.	1.1	0
154	Editorial 57. Foundations of Chemistry, 2017, 19, 181-181.	1.1	0
155	Periodic table turns 150 in 2019. C&EN Global Enterprise, 2018, 96, 2-2.	0.0	0
156	Editorial 60. Foundations of Chemistry, 2018, 20, 167-168.	1.1	0
157	Editorial 59. Foundations of Chemistry, 2018, 20, 87-88.	1.1	0
158	Editorial 61. Foundations of Chemistry, 2019, 21, 1-2.	1.1	0
159	Editorial 62. Foundations of Chemistry, 2019, 21, 137-138.	1.1	0
160	Examining the periodic tableâ€™s quantum connections, by Eric Scerri. C&EN Global Enterprise, 2019, 97, 38-39.	0.0	0
161	Editorial 63. Foundations of Chemistry, 2019, 21, 253-254.	1.1	0
162	Editorial 65. Foundations of Chemistry, 2020, 22, 135-136.	1.1	0

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163	Editorial 66. Foundations of Chemistry, 2020, 22, 347-347.	1.1	0
164	Editorial 64. Foundations of Chemistry, 2020, 22, 1-2.	1.1	0
165	Response to Geoffrey Neuss on how to teach the 4s and 3d orbital conundrum. Foundations of Chemistry, 2021, 23, 247.	1.1	0
166	Editorial 67. Foundations of Chemistry, 2021, 23, 1-2.	1.1	0
167	Editorial 68. Foundations of Chemistry, 2021, 23, 135-136.	1.1	0
168	Editorial 69. Foundations of Chemistry, 2021, 23, 297-298.	1.1	0
169	Constructivism, Relativism, and Chemical Education. , 2008, , 189-199.		0
170	Mendeleev's Legacy: THE PERIODIC SYSTEM. , 2009, , 112-117.		0
171	LOWDIN'S REMARKS ON THE AUFBAU PRINCIPLE AND A PHILOSOPHER'S VIEW OF AB INITIO QUANTUM CHEMISTRY. , 2009, , 91-110.		0
172	The Past and Future of the Periodic Table. , 2009, , 123-130.		0
173	The Role of Triads in the Evolution of the Periodic Table: Past and Present. , 2009, , 118-122.		0
174	How Good Is the Quantum Mechanical Explanation of the Periodic System?. , 2009, , 43-44.		0
175	The Electronic Configuration Model, Quantum Mechanics and Reduction. , 2009, , 18-34.		0
176	Chemistry, Spectroscopy, and the Question of Reduction. , 2009, , 13-17.		0
177	Ensayos sobre la Tabla PeriÃ³dica de los elementos quÃmicos. Revista Eureka Sobre EnseÃ±anza Y DivulgaciÃ³n De Las Ciencias, 2011, 8, 358-359.	0.4	0
178	5. The Russian genius â€“ Mendeleev. , 2011, , 58-71.		0
179	3. Atomic weight, triads, and Prout. , 2011, , 30-41.		0
180	4. Steps towards the periodic table. , 2011, , 42-57.		0

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181	Un relato sobre Siete Elementos. Revista Eureka Sobre EnseÃ±anza Y DivulgaciÃ³n De Las Ciencias, 2014, 11, 108-109.	0.4	0
182	On the Madelung Rule. Inference, 2017, 3, .	0.0	0
183	Minor Contributors Count as Much as Heroic Discoverers. ChemistryViews, 0, , .	0.0	0
184	Editorial 70 (the platinum issue). Foundations of Chemistry, 2022, 24, 1-2.	1.1	0