

Eric R Scerri

List of Publications by Year in descending order

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184
papers

1,581
citations

361045

20
h-index

414034

32
g-index

198
all docs

198
docs citations

198
times ranked

485
citing authors

#	ARTICLE	IF	CITATIONS
1	Prediction and the periodic table. <i>Studies in History and Philosophy of Science Part A</i> , 2001, 32, 407-452.	0.6	110
2	Have Orbitals Really Been Observed?. <i>Journal of Chemical Education</i> , 2000, 77, 1492.	1.1	90
3	THE CASE FOR THE PHILOSOPHY OF CHEMISTRY. <i>Synthèse</i> , 1997, 111, 213-232.	0.6	86
4	A Tale of Seven Elements. , 2013, , .		65
5	Philosophical Confusion in Chemical Education Research. <i>Journal of Chemical Education</i> , 2003, 80, 468.	1.1	55
6	The Electronic Configuration Model, Quantum Mechanics and Reduction. <i>British Journal for the Philosophy of Science</i> , 1991, 42, 309-325.	1.4	51
7	The Evolution of the Periodic System. <i>Scientific American</i> , 1998, 279, 78-83.	1.0	44
8	Has the Periodic Table Been Successfully Axiomatized?. <i>Erkenntnis</i> , 1997, 47, 229-243.	0.6	38
9	Philosophy of Chemistry – A New Interdisciplinary Field?. <i>Journal of Chemical Education</i> , 2000, 77, 522.	1.1	38
10	The Role of Triads in the Evolution of the Periodic Table: Past and Present. <i>Journal of Chemical Education</i> , 2008, 85, 585.	1.1	38
11	Chemistry, spectroscopy, and the question of reduction. <i>Journal of Chemical Education</i> , 1991, 68, 122.	1.1	37
12	Has Chemistry Been at Least Approximately Reduced to Quantum Mechanics?. <i>PSA Proceedings of the Biennial Meeting of the Philosophy of Science Association</i> , 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. <i>Annals of Science</i> , 1994, 51, 137-150.	0.2	35
15	Title is missing!. <i>Science and Education</i> , 2000, 9, 405-425.	1.7	35
16	Just how ab initio is ab initio quantum chemistry?. <i>Foundations of Chemistry</i> , 2004, 6, 93-116.	0.4	35
17	Why the 4s Orbital Is Occupied before the 3d. <i>Journal of Chemical Education</i> , 1996, 73, 498.	1.1	34
18	The dual sense of the term "element" attempts to derive the Madelung rule, and the optimal form of the periodic table, if any. <i>International Journal of Quantum Chemistry</i> , 2009, 109, 959-971.	1.0	31

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19	How Good Is the Quantum Mechanical Explanation of the Periodic System?. <i>Journal of Chemical Education</i> , 1998, 75, 1384.	1.1	29
20	The Recently Claimed Observation of Atomic Orbitals and Some Related Philosophical Issues. <i>Philosophy of Science</i> , 2001, 68, S76-S88.	0.5	28
21	A critique of Weisberg's view on the periodic table and some speculations on the nature of classifications. <i>Foundations of Chemistry</i> , 2012, 14, 275-284.	0.4	27
22	Popper's naturalized approach to the reduction of chemistry. <i>International Studies in the Philosophy of Science</i> , 1998, 12, 33-44.	0.2	24
23	Top-down causation regarding the chemistry-physics interface: a sceptical view. <i>Interface Focus</i> , 2012, 2, 20-25.	1.5	24
24	Can quantum ideas explain chemistry's greatest icon?. <i>Nature</i> , 2019, 565, 557-559.	13.7	22
25	Transition metal configurations and limitations of the orbital approximation. <i>Journal of Chemical Education</i> , 1989, 66, 481.	1.1	20
26	Recent attempts to change the periodic table. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2020, 378, 20190300.	1.6	19
27	THE NEW PHILOSOPHY OF CHEMISTRY AND ITS RELEVANCE TO CHEMICAL EDUCATION. <i>Chemistry Education Research and Practice</i> , 2001, 2, 165-170.	1.4	17
28	What is an element? What is the periodic table? And what does quantum mechanics contribute to the question?. <i>Foundations of Chemistry</i> , 2012, 14, 69-81.	0.4	15
29	Reduction and Emergence in Chemistry—Two Recent Approaches. <i>Philosophy of Science</i> , 2007, 74, 920-931.	0.5	14
30	Explaining the periodic table, and the role of chemical triads. <i>Foundations of Chemistry</i> , 2010, 12, 69-83.	0.4	14
31	The discovery of the periodic table as a case of simultaneous discovery. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2015, 373, 20140172.	1.6	14
32	Which Elements Belong in Group 3?. <i>Journal of Chemical Education</i> , 2009, 86, 1188.	1.1	13
33	Editorial 37. <i>Foundations of Chemistry</i> , 2011, 13, 1-7.	0.4	13
34	Provisional Report on Discussions on Group 3 of The Periodic Table. <i>Chemistry International</i> , 2021, 43, 31-34.	0.3	13
35	The Past and Future of the Periodic Table. <i>American Scientist</i> , 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. <i>Chemistry - A European Journal</i> , 2019, 25, 7410-7415.	1.7	12
38	The Periodic Table and the Electron. , 2009, , 35-42.		12
39	Eastern mysticism and the alleged parallels with physics. <i>American Journal of Physics</i> , 1989, 57, 687-692.	0.3	11
40	Ordinal Explanation of the Periodic System of Chemical Elements. <i>International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems</i> , 1998, 06, 387-399.	0.9	10
41	On the continuity of reference of the elements: a response to Hendry. <i>Studies in History and Philosophy of Science Part A</i> , 2006, 37, 308-321.	0.6	10
42	Cracks in the Periodic Table. <i>Scientific American</i> , 2013, 308, 68-73.	1.0	10
43	Five ideas in chemical education that must die. <i>Foundations of Chemistry</i> , 2019, 21, 61-69.	0.4	10
44	Looking Backwards and Forwards at the Development of the Periodic Table. <i>Chemistry International</i> , 2019, 41, 16-20.	0.3	10
45	Correspondence and Reduction in Chemistry. <i>Boston Studies in the Philosophy and History of Science</i> , 1993, , 45-64.	0.4	10
46	Have Orbitals Really Been Observed?. <i>Journal of Chemical Education</i> , 2002, 79, 310.	1.1	9
47	Response to Barnes's critique of Scerri and Worrall. <i>Studies in History and Philosophy of Science Part A</i> , 2005, 36, 813-816.	0.6	9
48	Recognizing rhenium. <i>Nature Chemistry</i> , 2010, 2, 598-598.	6.6	9
49	The exclusion principle, chemistry and hidden variables. <i>Synthese</i> , 1995, 102, 165-169.	0.6	8
50	Response to Needham. <i>International Studies in the Philosophy of Science</i> , 1999, 13, 185-192.	0.2	7
51	Constructivism, Relativism, and Chemical Education. <i>Annals of the New York Academy of Sciences</i> , 2003, 988, 359-369.	1.8	7
52	A revisionist history of atomism. <i>Metascience</i> , 2010, 19, 349-371.	0.1	7
53	The Quantum Mechanical Explanation of the Periodic System (author's reply). <i>Journal of Chemical Education</i> , 1999, 76, 1189.	1.1	6
54	Commentary on Allen & King's Response to the L'Abbe Challenge. <i>Foundations of Chemistry</i> , 2006, 8, 285-292.	0.4	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.	6.6	6
57	Hasok Chang on the nature of acids. Foundations of Chemistry, 2022, 24, 389-404.	0.4	6
58	Response to Vollmer's Review of Minds and Molecules. Philosophy of Science, 2003, 70, 391-398.	0.5	5
59	Another four bricks in the wall. Nature Chemistry, 2016, 8, 283-288.	6.6	5
60	Causation, electronic configurations and the periodic table. Synthese, 2020, 198, 9709.	0.6	5
61	The Periodic Table: The Ultimate Paper Tool in Chemistry. , 2001, , 163-177.		5
62	Bibliography of Secondary Sources on the Periodic System of the Chemical Elements. Foundations of Chemistry, 2001, 3, 183-195.	0.4	4
63	The Periodic Table. , 2012, , 329-338.		4
64	In Defense of Quantum Numbers. Journal of Chemical Education, 1999, 76, 608.	1.1	3
65	Editorial 4. Foundations of Chemistry, 2000, 2, 1-4.	0.4	3
66	Editorial 13. Foundations of Chemistry, 2003, 5, 1-6.	0.4	3
67	Editorial 21. Foundations of Chemistry, 2005, 7, 199-202.	0.4	3
68	The Gulf between chemistry and philosophy of chemistry, then and now. Structural Chemistry, 2017, 28, 1599-1605.	1.0	3
69	Editorial 58. Foundations of Chemistry, 2018, 20, 1-2.	0.4	3
70	Lowdin's Remarks on the Aufbau Principle and a Philosopher'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. <i>Journal of Chemical Education</i> , 1991, 68, 712.	1.1	2
74	Configurational energy and bond polarity. <i>The Journal of Physical Chemistry</i> , 1993, 97, 5786-5786.	2.9	2
75	A Critique of Atkins' Periodic Kindom and Some Writings on Electronic Structure. <i>Foundations of Chemistry</i> , 1999, 1, 295-303.	0.4	2
76	Philosophical Confusion in Chemical Education Research: Constructivism and Chemical Education (the author replies). <i>Journal of Chemical Education</i> , 2004, 81, 194.	1.1	2
77	Principles and Parameters in Physics and Chemistry. <i>Philosophy of Science</i> , 2004, 71, 1082-1094.	0.5	2
78	Finding francium. <i>Nature Chemistry</i> , 2009, 1, 670-670.	6.6	2
79	Editorial 40. <i>Foundations of Chemistry</i> , 2012, 14, 1-2.	0.4	2
80	The periodic table and the turn to practice. <i>Studies in History and Philosophy of Science Part A</i> , 2020, 79, 87-93.	0.6	2
81	Master of Missing Elements. <i>American Scientist</i> , 2014, 102, 358.	0.1	2
82	On Chemical Natural Kinds. <i>Journal for General Philosophy of Science</i> , 2020, 51, 427-445.	0.7	2
83	Demystification at What Cost? (the authors reply). <i>Journal of Chemical Education</i> , 1997, 74, 480.	1.1	1
84	Editorial 2. <i>Foundations of Chemistry</i> , 1999, 1, 107-109.	0.4	1
85	Editorial 1. <i>Foundations of Chemistry</i> , 1999, 1, 1-5.	0.4	1
86	Editorial 8 "Special Issue on the Periodic System of the Elements. <i>Foundations of Chemistry</i> , 2001, 3, 97-104.	0.4	1
87	Editorial 11. <i>Foundations of Chemistry</i> , 2002, 4, 93-96.	0.4	1
88	Editorial 14. <i>Foundations of Chemistry</i> , 2003, 5, 107-111.	0.4	1
89	Editorial 20. <i>Foundations of Chemistry</i> , 2005, 7, 119-123.	0.4	1
90	Editorial 23. <i>Foundations of Chemistry</i> , 2006, 8, 93-95.	0.4	1

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91	Editorial 26. Foundations of Chemistry, 2007, 9, 115-117.	0.4	1
92	Tales of technetium. Nature Chemistry, 2009, 1, 332-332.	6.6	1
93	Response to "The Role of Triads". Journal of Chemical Education, 2009, 86, 1185.	1.1	1
94	Editorial 34. Foundations of Chemistry, 2010, 12, 1-3.	0.4	1
95	Some comments on the views of Niaz, Rodriguez and Brito on Mendeleev's periodic system. Educacion Quimica, 2013, 24, 278-284.	0.1	1
96	Editorial 49. Foundations of Chemistry, 2015, 17, 1-3.	0.4	1
97	Editorial 55. Foundations of Chemistry, 2017, 19, 1-1.	0.4	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.	0.1	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.	1.0	1
103	In praise of triads. Foundations of Chemistry, 0, , .	0.4	1
104	Reductionist physics. Physics Education, 1990, 25, 138-139.	0.3	0
105	Aufbau mnemonics. Journal of Chemical Education, 1991, 68, 445.	1.1	0
106	Further Aufbau Nonsense. Journal of Chemical Education, 1994, 71, 270.	1.1	0
107	Interdisciplinary research at the Beckman institutes. Interdisciplinary Science Reviews, 1997, 22, 131-137.	1.0	0
108	Editorial 3. Foundations of Chemistry, 1999, 1, 221-223.	0.4	0

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109	Editorial 5. Foundations of Chemistry, 2000, 2, 95-98.	0.4	0
110	Editorial 7. Foundations of Chemistry, 2001, 3, 1-5.	0.4	0
111	Editorial 9. Foundations of Chemistry, 2001, 3, 197-199.	0.4	0
112	Editorial 10. Foundations of Chemistry, 2002, 4, 1-4.	0.4	0
113	Editorial 12. Foundations of Chemistry, 2002, 4, 179-182.	0.4	0
114	Editorial 15. Foundations of Chemistry, 2003, 5, 185-188.	0.4	0
115	HAFNIUM. Chemical & Engineering News, 2003, 81, 138.	0.2	0
116	Editorial 16. Foundations of Chemistry, 2004, 6, 1-2.	0.4	0
117	Editorial 17. Foundations of Chemistry, 2004, 6, 135-136.	0.4	0
118	Editorial 18. Foundations of Chemistry, 2004, 6, 199-201.	0.4	0
119	Philosophical Confusion in Chemical Education Research: Does Any of This Matter? (the author) Tj ETQq1 1 0.784314 rgBT /Overlock 10	1.1	0
120	Editorial 19 Special Issue on Philosophical Problems of Chemical Kinds. Foundations of Chemistry, 2005, 7, 1-4.	0.4	0
121	Editorial 22. Foundations of Chemistry, 2006, 8, 1-2.	0.4	0
122	Editorial 24. Foundations of Chemistry, 2006, 8, 221-223.	0.4	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.	0.4	0
125	Editorial 27. Foundations of Chemistry, 2007, 9, 219-220.	0.4	0
126	Editorial 28. Foundations of Chemistry, 2008, 10, 1-2.	0.4	0

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127	Editorial 29. Foundations of Chemistry, 2008, 10, 77-78.	0.4	0
128	Editorial 30. Foundations of Chemistry, 2008, 10, 143-143.	0.4	0
129	Prediction and the Periodic Table. , 2009, , 45-90.		0
130	Editorial 31. Foundations of Chemistry, 2009, 11, 1-2.	0.4	0
131	Editorial 32. Foundations of Chemistry, 2009, 11, 61-62.	0.4	0
132	Editorial 33. Foundations of Chemistry, 2009, 11, 131-133.	0.4	0
133	Editorial 35. Foundations of Chemistry, 2010, 12, 95-96.	0.4	0
134	Editorial 36. Foundations of Chemistry, 2010, 12, 167-169.	0.4	0
135	Elementary interest. New Scientist, 2011, 211, 30-31.	0.0	0
136	Editorial 38. Foundations of Chemistry, 2011, 13, 85-86.	0.4	0
137	Editorial 39. Foundations of Chemistry, 2011, 13, 171-172.	0.4	0
138	Editorial 42. Foundations of Chemistry, 2012, 14, 189-190.	0.4	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.	0.4	0
141	Editorial 44. Foundations of Chemistry, 2013, 15, 123-123.	0.4	0
142	Editorial 43. Foundations of Chemistry, 2013, 15, 1-2.	0.4	0
143	Editorial 45. Foundations of Chemistry, 2013, 15, 243-243.	0.4	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.	0.4	0
146	Editorial 46. Foundations of Chemistry, 2014, 16, 1-2.	0.4	0
147	Editorial 47. Foundations of Chemistry, 2014, 16, 85-86.	0.4	0
148	Editorial 50. Foundations of Chemistry, 2015, 17, 91-92.	0.4	0
149	Editorial 51. Foundations of Chemistry, 2015, 17, 181-181.	0.4	0
150	Editorial 53. Foundations of Chemistry, 2016, 18, 87-87.	0.4	0
151	Editorial 54. Foundations of Chemistry, 2016, 18, 177-178.	0.4	0
152	Editorial 52. Foundations of Chemistry, 2016, 18, 1-2.	0.4	0
153	Editorial 56. Foundations of Chemistry, 2017, 19, 95-96.	0.4	0
154	Editorial 57. Foundations of Chemistry, 2017, 19, 181-181.	0.4	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.	0.4	0
157	Editorial 59. Foundations of Chemistry, 2018, 20, 87-88.	0.4	0
158	Editorial 61. Foundations of Chemistry, 2019, 21, 1-2.	0.4	0
159	Editorial 62. Foundations of Chemistry, 2019, 21, 137-138.	0.4	0
160	Examining the periodic table'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.	0.4	0
162	Editorial 65. Foundations of Chemistry, 2020, 22, 135-136.	0.4	0

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163	Editorial 66. Foundations of Chemistry, 2020, 22, 347-347.	0.4	0
164	Editorial 64. Foundations of Chemistry, 2020, 22, 1-2.	0.4	0
165	Response to Geoffrey Neuss on how to teach the 4s and 3d orbital conundrum. Foundations of Chemistry, 2021, 23, 247.	0.4	0
166	Editorial 67. Foundations of Chemistry, 2021, 23, 1-2.	0.4	0
167	Editorial 68. Foundations of Chemistry, 2021, 23, 135-136.	0.4	0
168	Editorial 69. Foundations of Chemistry, 2021, 23, 297-298.	0.4	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 ALUFBAU 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 Periódica de los elementos químicos. Revista Eureka Sobre Enseñanza Y Divulgación De Las Ciencias, 2011, 8, 358-359.	0.2	0
178	5. The Russian genius " 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 Enseñanza Y Divulgación De Las Ciencias, 2014, 11, 108-109.	0.2	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.	0.4	0