

A Complete Bibliography of Publications in
Foundations of Chemistry

Nelson H. F. Beebe
University of Utah
Department of Mathematics, 110 LCB
155 S 1400 E RM 233
Salt Lake City, UT 84112-0090
USA

Tel: +1 801 581 5254
FAX: +1 801 581 4148

E-mail: beebe@math.utah.edu, beebe@acm.org,
beebe@computer.org (Internet)
WWW URL: <http://www.math.utah.edu/~beebe/>

23 May 2020
Version 1.16

Title word cross-reference

#504 [145].

$2n^2$ [19]. **\$30** [154]. $3d$ [401]. 4 [412]. $4s$ [401]. ${}_2$ [137, 254]. N [278]. d [150]. n [336]. $n + 10$ [336].

-Shells [150].

0 [145]. **0-465-02775-X** [154]. **0-7388-4196-X** [155].

1 [278]. **1914** [33]. **1929** [263, 67].

2 [145, 278]. **2-922686-00-0** [145]. **2007** [214, 221, 228]. **2008** [250]. **2012** [298, 299]. **2015** [468]. **21st** [179]. **2nd** [304, 303, 337].

30 [372]. **30-second** [532, 533, 534, 548, 372]. **35** [325]. **3rd** [323].

41 [362]. **4E7** [145].

5 [146, 324].

7P4 [145].

90 [146]. **90-5867-063-5** [146].

A. [67]. **above** [354]. **absorption** [268]. **account** [483, 202]. **acidity** [225]. **actinium** [375]. **active** [232]. **Activity** [150]. **Adequacy** [369]. **Ado** [280, 527]. **Advances** [388]. **advent** [226]. **adventure** [287, 530]. **Aesthetic** [163]. **Aesthetics** [101]. **aether** [216]. **Affinity** [120]. **affordance** [497]. **after** [499, 202]. **against** [386, 364]. **Age** [90, 506]. **agent** [283]. **Ahmed** [412]. **air** [501]. **air-related** [501]. **airs** [479]. **Alain** [145, 337]. **Alan** [271]. **Albert** [155]. **Alchemy** [145, 513]. **Alcindo** [374]. **aldohexoses** [446]. **Alexander** [304]. **Alexei** [304]. **alkali** [364]. **allegory** [447]. **Allen** [177]. **alternative** [438]. **America** [265]. **among** [285]. **Ana** [403]. **analysis** [494, 407, 458]. **Anastasios** [127]. **ancient** [391]. **Anne** [287]. **Anne-Marie** [287]. **answer** [461]. **Antonio** [496]. **any** [401]. **appear** [485]. **application** [45]. **applications** [198, 219, 388]. **approach** [438, 427]. **approximation** [260]. **arcane** [441]. **Architect** [97, 541]. **Argon** [50]. **arguing** [197]. **argument** [364]. **arguments** [365, 354]. **art** [431, 226]. **Artist** [97, 541]. **aspect** [311]. **Aspects** [192, 340, 258]. **assessment** [321]. **Athel** [13]. **Atkins** [20]. **Atom** [216, 521, 21, 88, 469, 271, 351, 504, 401, 344]. **Atomes** [261]. **Atomic** [19, 145, 32, 513, 458, 448]. **atomic-number** [448]. **Atomistic** [32]. **Atoms** [475, 341, 349, 521, 21, 150, 340, 500, 232, 352, 271]. **atop** [364]. **Audiences** [67, 540]. **Aufbau** [355]. **Austere** [345, 346]. **Author** [82, 105, 130, 156]. **Authors** [22, 40, 61, 48, 70, 84, 92, 107, 132, 158, 8]. **autonomic** [411]. **Autonomy** [142, 165, 335, 275]. **Avogadro** [320]. **Axel** [21].

B [536, 305, 325, 179, 67]. **back** [195]. **based** [448]. **Basic** [154, 446, 316]. **Basis** [124, 345, 333, 346]. **Basolo** [128]. **Bassam** [324]. **Be** [354, 342, 466]. **beer** [537]. **before** [499]. **beginnings** [494]. **beings** [427]. **Belousov** [44]. **Benfey** [97]. **Bensaude** [296, 67]. **Bensaude-Vincent** [296, 67]. **Bernadette** [296]. **Bernard** [21]. **Berzelian** [43]. **Better** [124, 461]. **Between** [146, 17, 168, 282, 259, 425, 431, 72, 500, 451, 508]. **Beyond** [524, 343, 461, 449, 337]. **BHC** [454]. **Bhushan** [66]. **biao** [534]. **Bibliography** [53]. **binary** [482]. **Biochemical** [13, 537]. **Biochemistry** [113, 72, 18, 377]. **Biological** [44]. **Biology** [72, 495, 356]. **Blind** [57]. **blocks** [369, 411]. **boats** [461]. **Bob** [305]. **Bohmian** [425]. **boiling** [402]. **Bombs** [145, 513]. **bond** [431, 267, 185, 217]. **bond-** [185]. **Bonding**

[81, 510, 212]. **bonds** [349, 481]. **Book** [103, 428, 81, 178, 237, 126, 271, 21, 154, 186, 146, 280, 90, 128, 145, 304, 296, 305, 297, 303, 324, 337, 338, 323, 325, 361, 371, 372, 370, 179, 239, 270, 121, 403, 76, 13, 238, 33, 104, 66, 180, 380, 67, 155, 263, 29, 97, 193, 287, 122, 187, 262, 261, 439]. **Books** [154, 208]. **Bookstore** [145]. **bottle** [537]. **boundary** [259]. **bounded** [341]. **Bowden** [13]. **Boyle** [310, 469, 496]. **Brakel** [146, 239, 308]. **branch** [379]. **Brazilian** [374]. **Breaking** [197]. **Brenner** [127]. **bridge** [500]. **Brock** [237]. **Buchner** [13, 537]. **build** [461]. **Burns** [536, 541, 97]. **butterfly** [462].

Cabral [374]. **Caldin** [409, 417]. **Call** [7, 34, 68, 69, 118, 36]. **caloric** [284]. **can** [342]. **Can.\$70.00** [145]. **Canada** [145]. **cannot** [466]. **Carbon** [74]. **carbonyls** [333]. **Carl** [90]. **Case** [74, 174, 471, 80, 206, 245]. **Catalytic** [160]. **Cathy** [103]. **Causal** [251]. **causality** [283]. **centers** [446]. **Centuries** [21]. **Century** [79, 282, 216, 462, 359, 329, 196, 43, 179, 297]. **Chain** [367]. **Challenge** [177]. **challenges** [212, 343, 376]. **Chalmers** [271]. **change** [462]. **changing** [430]. **chapter** [475]. **characteristics** [378]. **Charles** [241]. **Charley** [55]. **Chemical** [321, 96, 126, 430, 510, 135, 203, 293, 153, 142, 26, 127, 205, 97, 17, 53, 133, 191, 162, 502, 173, 137, 39, 427, 169, 208, 310, 408, 469, 382, 368, 349, 292, 433, 465, 311, 197, 415, 322, 251, 269, 267, 212, 209, 80, 323, 276, 284, 239, 481, 165, 331, 248, 474, 383, 359, 94, 516, 525, 483, 189, 95, 379, 199, 543, 247, 470, 185, 482, 226, 217, 81, 324]. **Chemie** [29]. **Chemist** [33, 330, 538, 222]. **Chemistry** [31, 265, 298, 152, 36, 519, 428, 74, 443, 124, 146, 98, 110, 72, 128, 145, 151, 38, 43, 37, 75, 78, 357, 26, 5, 33, 454, 409, 417, 67, 2, 424, 57, 87, 286, 163, 55, 162, 490, 88, 16, 102, 86, 144, 407, 112, 168, 111, 169, 10, 253, 471, 505, 475, 266, 282, 511, 539, 456, 394, 465, 512, 436, 422, 499, 229, 342, 419, 423, 425, 461, 431, 494, 546, 322, 210, 513, 231, 283, 236, 345, 366, 400, 80, 542, 523, 290, 538, 291, 246, 260, 312, 531, 410, 403, 365]. **chemistry** [540, 500, 383, 184, 480, 268, 380, 206, 261, 487, 472, 495, 332, 526, 230, 308, 116, 544, 449, 438, 346, 502, 175, 344, 388, 301, 275, 356, 451, 458, 376, 508, 47, 183, 296, 155, 303, 324, 103, 66, 338, 403, 238]. **Chemists** [6, 12, 395, 248, 329]. **Chief** [325]. **chimica** [515]. **chimie** [507, 76]. **chiral** [446, 385]. **chirality** [385, 232]. **choice** [456]. **Christie** [104]. **Christies** [144]. **Chromium** [174]. **chymical** [469]. **Circulation** [15]. **Cité** [145]. **civilization** [513, 145]. **classical** [290]. **Classification** [137, 39, 374]. **classifications** [313]. **classifying** [291]. **clear** [256]. **Clericuzio** [496]. **Climate** [462]. **Closed** [150]. **closer** [297]. **closure** [183]. **Clothes** [171]. **C’Nano** [393]. **CO** [254]. **coauthors** [451]. **Cobb** [103]. **Coello** [128, 511]. **cognitive** [395]. **Collected** [544, 412, 238]. **collection** [536]. **collective** [393]. **colourful** [431]. **column** [364]. **Combination** [126, 127]. **Comment** [164, 346, 274, 451]. **Commentary** [177, 117]. **Commercialization** [237, 520]. **Common** [112, 111]. **Communicating** [540, 67]. **community** [199]. **comparison** [456, 356]. **complex** [481]. **Complexity** [490, 102, 427]. **composition** [479]. **compound** [292]. **compounds** [402, 482].

Computational [38, 419]. **Computer** [377, 472]. **comunità** [515]. **Concept** [88, 169, 292, 383, 497, 94, 185, 222, 451]. **Conception** [153, 212]. **Concepts** [15, 191, 251, 531, 350, 95, 380]. **conceptual** [494, 495]. **Concerning** [316, 149, 161, 446, 407]. **concrete** [185]. **conditions** [377]. **conduit** [459]. **conference** [299]. **configuration** [446]. **Connecting** [410]. **connection** [454]. **Connections** [168]. **conservation** [474]. **Constitutive** [101]. **construct** [344]. **Constructivism** [170, 168, 169, 322, 171]. **Content** [423]. **Contents** [41, 62, 83, 106, 131, 157, 23]. **context** [197, 224, 424]. **Contingent** [171]. **continuity** [465]. **contribute** [294]. **Contributes** [52]. **contribution** [393, 374]. **controversy** [202]. **Cornish** [13]. **Cornish-Bowden** [13]. **Corporation** [155]. **corpuscles** [310]. **Correction** [467, 359]. **Corrigendum** [123, 129]. **counterarguments** [365]. **Courses** [124, 383]. **creative** [443]. **credit** [498]. **critical** [335]. **Critique** [20, 162, 313]. **Crookes** [237, 520]. **crystalline** [486]. **current** [343]. **Curriculum** [88]. **Cusco** [299].

D [154, 412]. **D.** [179, 33]. **David** [280]. **deal** [489]. **dealing** [392]. **Debate** [144]. **decoherence** [418]. **Deductive** [204]. **Deductive-Nomological** [204]. **define** [355]. **Deliberating** [393]. **Deltete** [127]. **demonstrations** [324, 502]. **densities** [510, 81]. **Department** [183]. **depend** [283]. **dependent** [276]. **Describe** [11]. **describing** [493]. **description** [318]. **Design** [79, 423, 317]. **determination** [235]. **Developing** [73, 497]. **development** [440, 246, 225]. **Diagnostics** [419]. **Dialectics** [400, 4]. **did** [329]. **Dietmar** [338]. **diffraction** [522, 305]. **dimensional** [396, 522, 305]. **Dioxin** [113]. **Direct** [25]. **disagreements** [407]. **disappearing** [528, 270]. **Discipline** [36]. **discourses** [269]. **discoveries** [358, 459]. **Discovery** [224, 100, 86, 498, 279, 486]. **Discussion** [149]. **display** [248]. **Distinctness** [2]. **distributed** [145]. **division** [485]. **Djerassi** [90]. **Dmitri** [258]. **Dmitrii** [154, 517, 196]. **Do** [283, 278, 255, 395]. **Does** [485, 437, 351, 57, 294]. **domain** [197]. **domain-specificity** [197]. **dong** [534]. **don't** [489]. **doubled** [485]. **Draper** [64]. **Duhem** [126]. **During** [73].

each [372, 532, 533, 548]. **Early** [43, 454, 268]. **earth** [268]. **economy** [524, 337]. **ed** [372, 370, 13, 380, 263, 91]. **Edited** [126]. **edition** [337]. **Editor** [325, 360, 352, 27, 185]. **Editor-in-Chief** [325]. **Editorial** [421, 327, 1, 9, 14, 24, 30, 35, 49, 42, 54, 63, 71, 77, 85, 93, 99, 108, 119, 125, 133, 141, 147, 159, 166, 172, 181, 188, 194, 200, 207, 213, 220, 227, 234, 240, 249, 257, 264, 272, 281, 288, 300, 306, 314, 326, 339, 348, 353, 363, 373, 381, 389, 397, 405, 413, 420, 429, 434, 442, 450, 455, 484, 463, 476, 491, 274, 435, 289, 468, 390, 250, 214, 221, 228, 362]. **Editors** [179]. **edn** [304, 303, 323]. **Eds** [303, 337, 338, 239, 33, 66, 67, 97]. **Eduard** [537, 13]. **Education** [169, 197, 322, 80, 470]. **Edward** [297, 409, 417]. **effect** [462]. **eighteenth** [462]. **Eka** [415]. **Eka-elements** [415]. **Elaborating** [153]. **electrolyte** [376]. **Electron** [81, 11, 510]. **Electronegativity** [426, 471, 316]. **Electronic**

[20, 350, 333]. **element** [229, 94, 294]. **elemental** [316]. **elementary** [283]. **Elements** [120, 136, 276, 149, 53, 49, 191, 39, 208, 415, 411, 485, 372, 528, 481, 331, 248, 268, 202, 285, 532, 533, 534, 535, 548, 173, 482, 457, 371, 270]. **Ellen** [287, 530]. **else** [278]. **elucidation** [446]. **emancipation** [301]. **Embodiment** [78]. **Emergence** [312, 78, 5, 223, 384, 500]. **emerging** [416]. **Émile** [474]. **Empirical** [101, 215, 472]. **Encapsulating** [25]. **energetic** [198, 219]. **Energetics** [182, 198, 219]. **enlarged** [337]. **Entropic** [350]. **entry** [436]. **Environmental** [357]. **Enzyme** [160]. **Epistemological** [88, 168, 94, 483]. **epistemology** [331]. **equilibrium** [487, 483]. **equivalent** [478]. **Eric** [117, 361, 371, 372, 238, 193, 262]. **Erling** [370]. **Ernst** [170, 211]. **Erratum** [445, 404, 362]. **errors** [459]. **Essays** [127, 263, 126]. **Essences** [135]. **essential** [229]. **Essentials** [382]. **Ethics** [37]. **Eugene** [45]. **Europe** [33, 538]. **evaluating** [472]. **everywhere** [503, 529, 304]. **evolution** [223]. **Examples** [18]. **Exeter** [183]. **exist** [255]. **existence** [266, 392]. **expectations** [474]. **Experimental** [38, 474]. **Experimental/Theoretical/Computational** [38]. **Experiments** [526, 377, 175, 338]. **Explain** [115]. **Explained** [117, 372, 532, 533, 548]. **Explaining** [247, 143]. **Explanation** [204, 113, 236, 191, 112, 143, 111, 469, 210, 283]. **Explanations** [51, 349]. **Explanatory** [112, 111]. **extent** [383]. **externalism** [322]. **Extractive** [145].

faces [342, 426]. **Factory** [428]. **Failed** [521, 271]. **failure** [464]. **Fathi** [145]. **February** [414]. **ferment** [408]. **fifth** [433]. **filling** [341]. **fills** [401]. **First** [79, 51, 143, 310, 364, 383, 354, 250, 401]. **first-order** [310]. **first-year** [383]. **Fisher** [280]. **fission** [279]. **Fit** [50]. **Five** [470]. **Flores** [374]. **force** [276, 232]. **form** [316]. **formal** [494]. **formation** [236]. **formats** [283]. **Formula** [19]. **formulae** [333]. **Formulas** [43, 210]. **formulation** [369]. **Fortin** [451]. **fortunate** [258]. **foundation** [483]. **Foundations** [31, 170, 376, 487]. **fourth** [465]. **Foy** [145]. **Frantisek** [263]. **Fred** [128]. **function** [310, 469, 225]. **Fundamental** [215, 88, 369, 411, 233]. **Further** [486, 354]. **fuzzy** [185].

G [337]. **G1K** [145]. **G1X** [145]. **Gain** [521, 271]. **Galen** [505, 155]. **gallium** [252]. **gao** [534]. **Gas** [56, 337, 524]. **gases** [527, 196, 280]. **Gavroglu** [403]. **Gene** [4]. **general** [383]. **genesis** [45]. **genius** [241]. **Geometry** [81, 510]. **George** [337, 268]. **Gestalt** [163]. **Getting** [478]. **Giant** [503, 529, 304]. **Gillespie** [81]. **Giovanni** [490]. **given** [259]. **Glaserfeld** [170, 211]. **Glauber** [496]. **Gleditsch** [287, 530]. **glue** [253]. **Goeppert** [337]. **goods** [430]. **Gordin** [154]. **grammars** [269]. **graphic** [411]. **Grapi** [501]. **Green** [151, 357, 454, 338, 246, 410, 526]. **Greene** [323]. **Grosberg** [304]. **Group** [336, 45, 242]. **Growth** [13, 537]. **Guest** [421, 435, 289, 468, 390]. **guide** [355, 323, 516, 525].

H [237, 412, 179, 33, 137]. **Habashi** [145]. **hadronic** [388]. **half**

[372, 532, 533, 548]. **handbook** [324, 502]. **handle** [436]. **hardbound** [145]. **Hargittai** [297]. **hasn't** [117]. **Head** [55]. **heat** [398, 439]. **Hegel** [59]. **Heisenberg** [267]. **helium** [457]. **helix** [492]. **Helmont** [408]. **Help** [191]. **helps** [311]. **her** [287, 530]. **Herbert** [338]. **here** [503, 529, 304]. **Hevesy** [268]. **Highes** [31]. **historical** [184, 483]. **historical/epistemological** [483]. **histories** [320]. **History** [103, 428, 21, 174, 280, 145, 65, 26, 33, 97, 465, 512, 422, 378, 311, 279, 527, 461, 546, 513, 528, 538, 270, 501, 403, 454, 487, 504, 449, 254, 441]. **honour** [536]. **horizons** [229]. **hua** [534]. **Human** [21, 504]. **Hund** [355]. **Hurmuzescu** [302]. **hybrid** [408]. **Hydrogen** [161, 143, 364, 190, 460]. **Hypotheses** [32].

Ibuprofen [454]. **idealisations** [493]. **Idealization** [169]. **ideas** [483, 470]. **Identity** [137]. **IdF** [393]. **II** [398, 219, 364]. **Ilya** [176]. **Image** [146, 163, 508]. **imaging** [273]. **Immaculate** [90, 506]. **impact** [268]. **Implementation** [218]. **implications** [357, 340]. **Imponderable** [64]. **impossibility** [334]. **impossible** [367]. **impure** [519, 296]. **incompatibilities** [516, 525, 323]. **Incompatible** [471]. **inconsistencies** [318]. **independent** [459]. **Index** [40, 61, 82, 105, 130, 156, 22]. **individuals** [436, 319]. **Industrial** [454]. **inertness** [385]. **Influence** [211, 408]. **Influences** [176]. **influential** [297]. **Ingold** [31]. **initio** [116]. **inner** [244]. **innovation** [218]. **Innovative** [151]. **Inorganic** [128, 4, 511, 402, 325]. **inquiry** [290]. **insider** [183]. **Inspiring** [501]. **Instructions** [8, 48, 70, 84, 92, 107, 132, 158]. **Instrument** [17]. **Instrumental** [98]. **insularity** [461, 449]. **intercultural** [308]. **Interface** [72]. **Internal** [335, 485]. **International** [47, 299, 265, 298]. **Interplay** [160]. **interpretation** [408, 473, 488]. **Interpretive** [26]. **Interview** [170]. **Introducing** [399]. **Introduction** [109, 211, 126, 134, 307, 361]. **Introductory** [124]. **invention** [454]. **inventors** [138]. **ISBN** [154, 146, 145, 155]. **isms** [167]. **Isodiagonality** [277]. **Isoelectronic** [233]. **isolated** [493]. **isomeric** [446]. **Isomerism** [418, 473]. **isotopes** [498]. **ISPC** [298, 468, 250, 214, 221, 228]. **Issue** [49, 133, 468, 340]. **issues** [235]. **István** [297]. **Italia** [515, 122]. **italiana** [515]. **Itself** [112, 111].

J [428, 81, 303, 97]. **Jaap** [239, 146, 308]. **Janet** [241]. **Jean** [380]. **Jean-Pierre** [380]. **Jeffrey** [461]. **Joachim** [29]. **John** [64]. **Jonathan** [296]. **Judging** [297]. **July** [414]. **Just** [116]. **Justification** [149].

Kaji [414]. **Kant** [331, 230]. **Kean** [270]. **Kennepohl** [338]. **Kenneth** [303]. **key** [483]. **Khokhlov** [304]. **kind** [276]. **Kinds** [135, 133, 489]. **kinetics** [382]. **Kingdom** [20]. **Klabunde** [303]. **Klaus** [239, 263]. **Klein** [292, 91]. **Knight** [33, 189, 177]. **knowing** [330]. **Knowledge** [25, 521, 368, 537, 271, 295, 13]. **Kostas** [403]. **Kouso** [439]. **Kragh** [33]. **Kubaneck** [287]. **Kuhn** [321, 209]. **Kuhnian** [458].

L [81]. **Labarca** [335, 164]. **Laboratory** [91, 259, 428]. **Lagerkvist** [370]. **Lame** [57]. **landmark** [261]. **Language** [162, 494, 322, 482]. **Lanthanides** [148, 444, 445, 467]. **lanthanum** [375]. **Laszlo** [76]. **Latin** [265]. **Laval** [145]. **Lavoisier** [386, 398, 136, 515, 122]. **Law** [73, 369, 100, 52, 192, 197, 411]. **lawrencium** [375]. **Laws** [96, 86]. **Layer** [509, 104]. **Learning** [171, 169]. **Lectures** [155, 505]. **legacy** [267]. **less** [244, 287, 530]. **Let** [461]. **Letter** [27, 185, 352, 360]. **Leuven** [146, 146]. **Lewis** [81, 404, 510, 387]. **life** [287, 530, 258]. **Lifetime** [128, 511]. **light** [378, 486, 331, 439]. **like** [185]. **limitations** [357]. **Limits** [102, 293]. **linear** [446]. **lingua** [286]. **linkage** [336]. **Linking** [366, 365]. **living** [427]. **Llored** [380]. **logic** [355]. **Lombardi** [366, 335, 164]. **look** [297]. **love** [528, 270]. **Löwdin** [177]. **Lundgren** [67]. **lutetium** [375].

M [303, 33]. **Mackay** [486]. **macro** [494]. **macro-chemistry** [494]. **macromolecules** [245]. **madness** [528, 270]. **Magick** [512, 103]. **magnetochemistry** [302]. **Magnum** [16]. **make** [477]. **Making** [33, 538]. **man** [258]. **Manifest** [146, 508]. **many** [309]. **Mapping** [514, 121]. **Marcus** [378]. **Marie** [287]. **mark** [243, 155]. **Markovnikov** [65]. **marks** [334]. **Masanori** [414]. **mass** [474]. **material** [430, 290]. **materials** [303, 542, 523]. **Mathematical** [152, 192]. **Mathematics** [38]. **mathematize** [332]. **matrix** [258]. **Matter** [428, 412]. **Matters** [256]. **Maureen** [104]. **Mavericks** [103, 512]. **may** [480]. **Mayhem** [103, 512]. **me** [534]. **mean** [329]. **means** [273]. **measurable** [273]. **measurement** [426]. **Mechanical** [90, 394, 506, 488]. **Mechanics** [176, 79, 117, 45, 425, 384, 473, 466, 345, 500, 294, 438, 346, 356]. **mechanism** [282, 278]. **Mechanistic** [204]. **medium** [316]. **mei** [534]. **melting** [402]. **memorize** [395]. **memory** [414]. **Mendeleev** [154, 252, 73, 517, 136, 100, 195, 196, 464, 86, 258, 477]. **Mendeleiev** [364, 354]. **mereological** [344]. **Mereologies** [269]. **Mereology** [260, 328]. **Mess** [58]. **Metal** [150, 364]. **Métallurgie** [145]. **Metallurgy** [145, 513]. **Metals** [244, 242, 364, 354]. **metaphysical** [253]. **Metaphysics** [203, 160]. **methanol** [337, 524]. **Methodism** [167]. **methodologies** [531, 380]. **Meyerson** [474]. **Miao** [534]. **Michael** [154, 212, 268]. **Microstructuralism** [245]. **microstructure** [469]. **Minds** [66, 539]. **Mineral** [489]. **mineralogists** [489]. **minute** [532, 533, 548, 372]. **Miroir** [507, 76]. **misbehavior** [489]. **Misconception** [90, 506]. **missed** [370, 547]. **misunderstanding** [359]. **Mixture** [126, 56, 127]. **Mixtures** [140]. **Modality** [140]. **Model** [495, 88, 144, 394, 416]. **Modeling** [44]. **modelling** [80]. **Models** [143, 471, 80]. **Modern** [31, 97, 387, 404]. **Modes** [91]. **mole** [315, 320]. **Molecular** [81, 79, 163, 101, 510, 466, 447, 260, 500, 497, 273, 222]. **molecule** [437, 493, 344]. **Molecules** [328, 66, 341, 541, 539, 349, 503, 529, 304, 340, 500, 232, 352, 475, 97]. **monograph** [462]. **moonlighting** [245]. **moral** [410]. **Morris** [428, 97]. **most** [297, 372, 532, 533, 548]. **Motivations** [182, 343]. **Move** [189].

Moving [449, 461]. **Much** [527, 57, 280]. **multiple** [426, 459]. **must** [470].

Naïve [167]. **Nalini** [66]. **Naming** [202]. **nan** [534]. **nano** [392]. **nanomaterials** [436]. **Nanoscale** [542, 523, 303]. **Nanoscience** [393]. **Nanotechnology** [391, 163]. **Narrative** [120]. **natural** [355, 489, 441]. **Nature** [4, 59, 86, 398, 239, 309, 184, 543, 313, 217]. **Need** [57, 395, 184, 253]. **Needham** [126, 165, 32]. **Neglect** [10]. **neglected** [311]. **Neither** [546, 403]. **neon** [457]. **network** [481, 482]. **Newlands** [248]. **ni** [534]. **Nineteenth** [359, 216, 329, 43]. **Nineteenth-century** [359, 216, 329, 43]. **nitrate** [310]. **No** [139, 253]. **Nobel** [370, 547, 196]. **Noble** [280, 150, 527, 196]. **Nomological** [204]. **Non** [162, 266, 341, 384]. **non-existence** [266]. **Non-observables** [162]. **non-overlapping** [341]. **non-reducibility** [384]. **nor** [546, 403]. **Norrby** [370]. **Notation** [32]. **note** [212, 335]. **Nothing** [280, 530, 527, 287]. **Novel** [155, 505]. **nowadays** [391]. **nuclear** [279, 232]. **number** [320, 235, 458, 448]. **Numbers** [11]. **Numerical** [39].

O [97, 137]. **Objects** [290, 424]. **Observables** [162]. **Obstacle** [88]. **Occasion** [144]. **occur** [369, 278]. **Off** [6, 12]. **Office** [393]. **oil** [337, 524]. **Olah** [337]. **old** [537, 224, 275]. **One** [330, 64, 11, 297, 401]. **One-Electron** [11]. **Ontological** [282, 142, 164, 310, 384, 392, 165, 335]. **ontologies** [284]. **ontology** [408, 430, 231]. **open** [341]. **Operations** [392]. **optical** [473]. **optically** [232]. **Opus** [16, 331]. **orbital** [260, 273, 451]. **orbitals** [355, 255]. **order** [310]. **Ordered** [154, 517]. **Organic** [31, 419, 210]. **Organized** [167]. **Origin** [74, 100, 163, 292, 225, 232]. **Origins** [182, 246]. **orthodox** [343]. **oscillating** [400]. **oscillations** [382]. **Ostwald** [182, 198, 219]. **Other** [167, 528, 270]. **Other-isms** [167]. **Our** [36]. **Outline** [16]. **Overcoming** [497]. **overlapping** [341]. **overview** [246]. **Oxidation** [235]. **Ozone** [509, 104].

P [45, 323, 263]. **P.** [97]. **panenmentalist** [367]. **Paneth** [230, 331]. **Paper** [117, 43]. **Papers** [34, 68, 69, 118, 7, 536, 238, 544, 545, 262]. **Paradoxes** [137]. **parallel** [266]. **Part** [364, 198, 219]. **particle** [195]. **particular** [401]. **parts** [411]. **patches** [215]. **patterns** [336]. **Paul** [81, 126, 32]. **Pauli** [355]. **Peculiar** [86]. **Pedagogical** [168]. **Pedagogy** [65]. **Pegniochemistry** [379]. **Peirce** [55]. **Perception** [163]. **Pere** [501]. **Perfect** [56]. **period** [485]. **Periodic** [89, 73, 117, 50, 154, 242, 369, 100, 179, 51, 148, 333, 52, 149, 193, 336, 192, 161, 20, 53, 49, 518, 191, 39, 299, 499, 197, 517, 452, 375, 361, 370, 528, 195, 547, 190, 270, 316, 374, 201, 233, 277, 401, 545, 247, 313, 294, 241, 453, 262, 416, 448, 457, 400, 411, 460]. **Periodicity** [317, 333, 447, 485, 248]. **periods** [369]. **Periphery** [45]. **persistence** [426]. **Perspective** [509, 425, 427, 104]. **Perspectives** [66, 539]. **Peru** [299]. **Peter** [428]. **phenomena** [199]. **Phenomenological** [143]. **Philosopher** [521, 271]. **philosophica** [286]. **Philosophical** [124, 176, 340, 66, 133, 252, 539, 496, 486, 407]. **Philosophische** [29].

Philosophy

[47, 265, 298, 36, 521, 509, 74, 6, 12, 72, 80, 5, 104, 59, 308, 18, 16, 102, 10, 508, 310, 469, 436, 271, 461, 531, 410, 238, 380, 230, 544, 449, 441, 146].
phlogiston [386, 398, 440, 284]. **Photophysics** [174]. **Photophysics-** [174].
Physical [103, 216, 512, 256, 487]. **Physics**
[52, 57, 191, 475, 425, 546, 366, 195, 403, 365, 184, 268, 175, 451, 253]. **Piece**
[50]. **Pierre** [76, 380, 126]. **pivotal** [451]. **place** [201, 354]. **placement** [364].
platinum [242]. **platinum-group** [242]. **pluralism** [293, 407]. **plus** [145].
Pohanish [323]. **points** [402]. **Polanyi** [268]. **Policy** [113]. **Polyelectronic**
[11]. **Popelier** [81]. **Posidonius** [206]. **Position** [161, 457, 460]. **positions**
[375]. **possibilities** [367, 358, 415, 486]. **possibility** [334]. **postage** [145].
postumum [331]. **potassium** [310]. **Power** [160]. **Power-** [160]. **powerful**
[383]. **pp** [154, 146, 145, 155]. **Practical** [75, 409, 417]. **Practically**
[280, 527]. **practice** [406, 175]. **practices** [368, 531, 380]. **Prague** [263].
Prakash [337]. **Prediction** [113]. **Predictions** [89, 252, 464, 477].
prehistory [254]. **Press** [146, 263]. **Presuppositions** [203]. **Priestley** [479].
Prigogine [176, 309]. **Principles** [120, 446]. **priori** [474]. **Prize** [547, 370].
prizes [196]. **problem** [475, 473, 392, 335, 173, 407]. **Problems**
[133, 440, 275]. **Process** [160, 454]. **processes** [494, 487]. **product** [430].
production [295]. **Professionalism** [37]. **Professor** [414]. **Program** [60].
Programme [171, 347]. **progress** [495]. **progressing** [401]. **Progressive**
[171]. **promoting** [197]. **properties** [252]. **property** [316, 233]. **prospects**
[343]. **proteins** [245]. **Prototypical** [174]. **Public** [113]. **Pullman** [21].
Pure [358, 415, 486]. **purity** [295]. **put** [190]. **puzzle** [311].

qi [534]. **QTAIM** [340, 347, 343]. **Quality** [454]. **Quantum**
[79, 117, 384, 149, 11, 191, 341, 45, 546, 473, 466, 236, 345, 260, 312, 403, 340,
500, 268, 472, 116, 294, 438, 346, 475]. **quasicrystals** [334]. **Québec**
[145, 145]. **quest** [452, 432]. **question** [334, 243, 294]. **Questions** [191, 168].

R [21, 304, 361, 179, 193, 262]. **R.** [536]. **Radical** [170]. **Rallying** [36].
range [235]. **Rapoport** [226]. **rare** [268]. **rather** [452]. **Rauchfuss** [325].
ray [522, 305]. **Rays** [64]. **Re** [472, 321, 436]. **re-assessment** [321]. **re-entry**
[436]. **Re-evaluating** [472]. **Reaction** [44, 383]. **Reactions**
[203, 153, 511, 367, 400, 474, 278, 439, 318, 128]. **Reactivity** [114]. **Reading**
[25]. **Realism** [422, 406, 46, 335]. **Realismus** [29]. **really** [352]. **Reasoning**
[75]. **Reception** [100]. **Recommended** [191]. **reconciled** [342].
reintegration [310, 496]. **Redox** [318]. **reduced** [466]. **reducibility** [384].
Reduction [164, 475]. **Reductionism** [3]. **reductive** [345, 346].
Reflections [152, 36, 386, 398]. **Reisinger** [21]. **Related**
[126, 127, 479, 501, 402]. **Relation** [39, 355]. **relations** [482]. **Relationship**
[17, 169, 425, 189, 451]. **Relationships** [285]. **relativity** [399]. **remembered**
[536]. **remix** [492]. **Remnants** [3]. **reply** [496, 347, 366]. **Repositioned**
[148]. **Representation** [121, 91, 101, 368, 396, 423, 514, 411, 448].

representations [453]. **represented** [316]. **reproduction** [506, 90].
Research [72, 121, 481, 17, 171, 168, 169, 514, 347]. **resonance** [267].
Response [96, 179, 127, 360, 28, 177, 112, 165]. **responsibility** [393].
Retrodictions [89]. **Reveal** [112, 111]. **revelation** [452]. **reverse** [432].
reversible [487]. **Review**
 [103, 428, 81, 237, 126, 271, 21, 154, 186, 146, 280, 90, 128, 145, 304, 296, 305,
 297, 303, 324, 337, 338, 323, 325, 361, 371, 372, 370, 239, 270, 121, 403, 76, 13,
 238, 33, 104, 66, 180, 380, 67, 155, 263, 29, 97, 193, 287, 122, 187, 262, 178].
Revised [148]. **Revisited** [135, 417, 248, 409]. **Revolution**
 [321, 98, 26, 433, 465, 452, 209, 458]. **Richard** [323]. **Richards** [303]. **riddle**
 [224]. **right** [478]. **rightful** [201]. **Rise** [31, 302]. **Ritter** [302]. **rivoluzione**
 [515]. **Road** [191]. **Robert** [310, 536, 541, 127, 97]. **Roesky** [338]. **Role**
 [38, 162, 143, 247, 493]. **Ronald** [81]. **Roots** [454]. **Rosenfeld** [66]. **rue**
 [145]. **Rule** [65, 355]. **rule-set** [355]. **rupture** [465]. **Ruthenberg** [239, 263].
Ryan [303].

S [278]. **Sainte** [145]. **Salt** [139]. **saltpeter** [496]. **Sam** [270]. **Saving** [199].
scandium [252]. **Scerri** [361, 371, 372, 238, 193, 262, 117]. **Schummer** [29].
Science [521, 509, 113, 6, 12, 104, 490, 160, 171, 144, 519, 520, 216, 378, 443,
 271, 395, 501, 409, 417, 379, 459, 407, 530, 441, 237, 296, 287]. **Sciences**
 [97, 91]. **Scientific** [146, 46, 191, 86, 358, 199, 175, 407, 508]. **scientifica**
 [515]. **Scientist** [521, 271]. **scientists** [297, 202]. **Scrutinizing** [86]. **Sea**
 [139]. **Search** [26]. **second** [310, 532, 533, 534, 548, 221, 372]. **second-order**
 [310]. **Secondary** [53, 485, 278]. **Seeman** [461]. **Seimika** [439]. **Selected**
 [545, 262]. **semantics** [322]. **semi** [472]. **semi-empirical** [472]. **separating**
 [175]. **serendipity** [224]. **Series** [97, 233]. **set** [355]. **seventeenth** [282]. **Sex**
 [90, 506]. **Shadow** [154, 517]. **Shahbazian** [347]. **Shakhashiri** [324]. **shape**
 [351]. **Shechtman** [334]. **Shell** [19]. **Shell-Structure** [19]. **Shells** [150].
shifts [229]. **short** [361, 320]. **should** [498]. **side** [256]. **Significance**
 [518, 252, 486, 189, 193]. **significant** [372, 532, 533, 548]. **Signs** [112, 111].
Similarity [368]. **Simões** [403]. **Simon** [296]. **Simple** [153]. **simulations**
 [377, 472]. **simultaneous** [459]. **single** [355]. **sixteenth** [282]. **Skepticism**
 [167, 497]. **Sketch** [60]. **Sketches** [18]. **Social** [33, 538]. **Society**
 [47, 265, 298, 393]. **sociology** [461, 449]. **Solid** [153]. **solvolysis** [278]. **Some**
 [176, 203, 20, 378, 358, 313, 185]. **something** [278]. **somewhat** [258]. **Sonya**
 [226]. **Sources** [53]. **space** [341, 396]. **space-filling** [341]. **speaking** [482].
Special [340, 49, 133, 468]. **specificity** [197]. **Specimen** [17].
Spectrometer [25]. **Spectrum** [121, 143, 514]. **speculations** [313].
spherical [453]. **spin** [276]. **spin-dependent** [276]. **Spinoza** [496]. **Spiral**
 [411]. **spirals** [196]. **spirit** [408]. **Spirited** [103, 512]. **spoon** [528, 270].
Stability [114]. **Stanley** [323]. **Start** [55]. **State** [153]. **Statement** [137].
Statistical [176, 488]. **Status** [169, 94, 343]. **step** [500]. **Stoffen** [29].
stoically [206]. **stoichiometric** [482]. **Stone** [521, 271]. **Story** [193, 518].
Strain [115, 114]. **Straining** [115]. **Strategies** [26, 112, 111]. **strategy** [446].

strictly [466]. striking [358]. strong [384]. **Structural** [210, 469, 212]. **Structure** [19, 20, 402, 114, 311, 466, 350, 437, 497, 222]. **Structure-related** [402]. **Structured** [356]. **Stuart** [66]. **Studies** [46]. **study** [383, 427]. **Stuff** [319, 543]. **Stuff**. [239]. **Subatomic** [51]. **subsets** [485]. **subshells** [401]. **substance** [229, 430]. **substances** [293, 290, 392, 543, 239]. **substrates** [278]. **Succeeded** [521, 271]. **success** [464]. **successful** [252]. **Summer** [298, 265]. **supervenience** [205]. **supporting** [483]. **Supramolecular** [163]. **Surya** [337]. **Sustainability** [357]. **sustainable** [338, 526]. **Switch** [163]. **symbolism** [226]. **Symmetry** [396, 385]. **Symposium** [298, 265]. **synergetics** [400]. **Syntheses** [325]. **Synthesis** [115, 218]. **System** [50, 51, 53, 49, 191, 39, 241, 453, 356, 448, 411]. **Systemic** [490, 427]. **Systems** [87, 11, 44, 341, 385, 95]. **systems-theoretical** [95].

T [428, 97]. **Table** [89, 117, 242, 457, 364, 179, 148, 333, 149, 193, 161, 518, 299, 499, 517, 452, 485, 375, 361, 370, 528, 195, 547, 190, 270, 316, 201, 354, 277, 401, 545, 247, 313, 294, 416, 154, 400, 460, 262]. **tables** [196]. **take** [206]. **tale** [371, 535]. **tales** [528, 270, 495]. **tangible** [259]. **teach** [480]. **teachers** [324, 502]. **Teaching** [499, 88, 168, 169, 355, 514, 121]. **Techniques** [121, 514]. **Technochemistry** [330]. **Technology** [151]. **Teller** [297]. **Telltale** [112, 111]. **telluric** [492]. **temperature** [488]. **tensions** [282]. **tests** [474]. **Tetrahedral** [74, 453]. **Textbooks** [67, 540]. **Their** [143, 215, 540, 67, 318]. **Theoretical** [110, 38, 75, 144, 143, 486, 95]. **Theories** [96, 217, 86, 215, 440]. **Theory** [31, 475, 456, 87, 160, 386, 45, 198, 219, 231, 236, 385, 340, 500, 350, 359, 387, 404, 399, 268, 483, 329, 459, 482]. **there** [139, 503, 529, 304, 352]. **thermal** [487]. **Thermodynamic** [487]. **thermodynamics** [382]. **Thing** [154, 517]. **third** [276, 228, 299]. **Thomas** [209, 325]. **thought** [424, 504, 175, 21]. **three** [396, 334]. **time** [391]. **Tithonic** [64]. **tomographic** [273]. **Tools** [43, 91]. **topological** [351]. **total** [218]. **transfer** [495]. **transformations** [383]. **transition** [244, 285]. **Translated** [32, 126, 21]. **translation** [439, 432]. **triads** [247, 448]. **Trichotomy** [38]. **Trivial** [171]. **Trope** [231]. **true** [528, 270, 460, 217]. **truth** [416]. **turn** [406]. **Turned** [6, 12]. **twentieth** [297]. **Twenty** [79]. **Two** [522, 500, 342, 485, 485, 305]. **Two-dimensional** [522, 305]. **Two-step** [500]. **typical** [244].

U [91]. **U.S.\$50.00** [145]. **Udagawa** [439]. **Ulf** [370]. **uncertainty** [392]. **Understanding** [52, 382, 184]. **unfragmented** [355]. **unifying** [438]. **universals** [173]. **universes** [266]. **Universitaire** [145]. **University** [146, 145, 80, 183]. **unrecognized** [241]. **Unruly** [58]. **Untersuchungen** [29]. **update** [375]. **updated** [337]. **uranium** [243]. **Use** [11]. **Useful** [18]. **Using** [355]. **usually** [316].

Valencies [444, 445, 467]. **valency** [387, 404]. **variants** [485]. **variations** [369]. **vernaculars** [251]. **version** [387, 404]. **versus** [204, 319, 474]. **very**

[361]. **view** [183, 481, 95, 320, 313]. **Viewing** [291]. **Views** [211, 479]. **Vihalemm** [96]. **viii** [145, 242]. **Villani** [490]. **Vincent** [296, 67]. **Visual** [121, 514]. **visualization** [412, 317]. **vitalism** [282]. **vitro** [377]. **vivo** [377]. **vivo-in** [377]. **voices** [309]. **Void** [21]. **Volume** [23, 40, 41, 61, 62, 82, 83, 105, 106, 130, 131, 156, 157, 324, 325].

W [338]. **Wald** [263]. **was** [258]. **waste** [430]. **water** [479, 137]. **Wave** [394]. **Wave-mechanical** [394]. **ways** [330, 291]. **weak** [232]. **Weidler** [287]. **Weisberg** [313]. **Weisberg's** [212]. **Well** [154, 517]. **Well-Ordered** [154, 517]. **Where** [190]. **Which** [401]. **Whom** [498]. **Wigner** [45]. **Wiley** [323, 516, 525]. **Wilhelm** [182, 198, 219]. **William** [64, 520, 237]. **Wissenschaft** [29]. **within** [440, 201]. **Woodward** [97, 536, 541]. **Work** [73, 124, 378, 268, 451, 258]. **works** [412]. **World** [142, 97, 58, 541, 528, 270, 165]. **Would** [124, 50]. **Writings** [20]. **wrong** [478].

X [154, 305, 155, 522]. **X-ray** [305, 522]. **xiang** [534]. **xiv** [146]. **Xlibris** [155]. **xue** [534]. **xx** [154]. **XYZ** [138].

year [383]. **York** [154]. **Youan** [439]. **yuan** [534].

Z [324]. **Zewail** [412]. **Zhabotinsky** [44]. **zhou** [534]. **Zone** [145].

References

Scerri:1999:Ea

- [1] Eric R. Scerri. Editorial 1. *Foundations of Chemistry*, 1(1):1–5, March 1999. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009976108288>.

Plesch:1999:DC

- [2] Peter H. Plesch. On the distinctness of chemistry. *Foundations of Chemistry*, 1(1):6–15, March 1999. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009980225127>.

Vemulapalli:1999:RR

- [3] G. Krishna Vemulapalli and Henry Byerly. Remnants of reductionism. *Foundations of Chemistry*, 1(1):17–41, March 1999. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009984310105>.

Mackay:1999:DNI

- [4] Alan L. Mackay. From “the dialectics of nature” to the inorganic gene. *Foundations of Chemistry*, 1(1):43–56, March 1999. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009924107380>.

McIntyre:1999:EPC

- [5] Lee McIntyre. The emergence of the philosophy of chemistry. *Foundations of Chemistry*, 1(1):57–63, March 1999. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009932309197>.

Good:1999:WCTa

- [6] Robert J. Good. Why are chemists ‘turned off’ by philosophy of science? *Foundations of Chemistry*, 1(1):65–95, March 1999. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009931623309>.

Anonymous:1999:CP

- [7] Anonymous. Call for papers. *Foundations of Chemistry*, 1(1):97, March 1999. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/A:1017230830409>.

Anonymous:1999:IA

- [8] Anonymous. Instructions for authors. *Foundations of Chemistry*, 1(1):99–106, March 1999. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1017259931318>.

Scerri:1999:Eb

- [9] Eric R. Scerri. Editorial 2. *Foundations of Chemistry*, 1(2):107–109, June 1999. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009917310399>.

vanBrakel:1999:NPC

- [10] J. van Brakel. On the neglect of the philosophy of chemistry. *Foundations of Chemistry*, 1(2):111–174, June 1999. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009936404830>.

Richman:1999:UOE

- [11] Robert M. Richman. The use of one-electron quantum numbers to describe polyelectronic systems. *Foundations of Chemistry*, 1(2):173–181, June 1999. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009988526035>.

Good:1999:WCTb

- [12] Robert J. Good. Why are chemists ‘turned off’ by philosophy of science? *Foundations of Chemistry*, 1(2):185–215, June 1999. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009934808874>.

Malmstrom:1999:BRA

- [13] Bo G. Malmström. Book review: Athel Cornish-Bowden, ed., *Eduard Buchner and the Growth of Biochemical Knowledge*. *Foundations of Chemistry*, 1(2):217–219, June 1999. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009998112333>.

Scerri:1999:Ec

- [14] Eric R. Scerri. Editorial 3. *Foundations of Chemistry*, 1(3):221–223, October 1999. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009974614720>.

Laszlo:1999:CC

- [15] Pierre Laszlo. Circulation of concepts. *Foundations of Chemistry*, 1(3):225–238, October 1999. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009964503013>.

VanCik:1999:OMO

- [16] Hrvoj VanCik. Opus magnum: An outline for the philosophy of chemistry. *Foundations of Chemistry*, 1(3):239–254, October 1999. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009989903921>.

Rothbart:1999:RBI

- [17] Daniel Rothbart. On the relationship between instrument and specimen in chemical research. *Foundations of Chemistry*, 1(3):255–268, October 1999. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009902306647>.

Strand:1999:TUP

- [18] Roger Strand. Towards a useful philosophy of biochemistry: Sketches and examples. *Foundations of Chemistry*, 1(3):269–292, October 1999. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009994005739>.

Harcourt:1999:ASS

- [19] Richard D. Harcourt. The atomic shell-structure formula $2n^2$. *Foundations of Chemistry*, 1(3):293–294, October 1999. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/A:1009906525864>.

Scerri:1999:CAP

- [20] Eric R. Scerri. A critique of Atkins' periodic kingdom and some writings on electronic structure. *Foundations of Chemistry*, 1(3):295–303, October 1999. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009906513673>.

Everdell:1999:BRC

- [21] William R. Everdell. Book review: 25 centuries of atoms and void. Pullman, Bernard, *The Atom in the History of Human Thought*, translated by Axel R. Reisinger. *Foundations of Chemistry*, 1(3):305–309, October 1999. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009929123489>.

Anonymous:1999:AI

- [22] Anonymous. Authors index. *Foundations of Chemistry*, 1(3):311, October 1999. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/A:1017294916963>.

Anonymous:1999:VC

- [23] Anonymous. Volume contents. *Foundations of Chemistry*, 1(3):312–314, October 1999. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1017201816055>.

Scerri:2000:Ea

- [24] Eric R. Scerri. Editorial 4. *Foundations of Chemistry*, 2(1):1–4, ??? 2000. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009984100928>.

Baird:2000:EKD

- [25] Davis Baird. Encapsulating knowledge: The direct reading spectrometer. *Foundations of Chemistry*, 2(1):5–46, 2000. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009958604987>.

McEvoy:2000:SCR

- [26] John G. McEvoy. In search of the chemical revolution: Interpretive strategies in the history of chemistry. *Foundations of Chemistry*, 2(1):47–73, 2000. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009968823008>.

Nesbet:2000:LE

- [27] Robert K. Nesbet. Letter to the Editor. *Foundations of Chemistry*, 2(1):75–76, 2000. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/A:1009907629118>.

Scerri:2000:R

- [28] Eric Scerri. Response. *Foundations of Chemistry*, 2(1):77–78, 2000. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/A:1009963900271>.

Ramsey:2000:BRJ

- [29] Jeffrey L. Ramsey. Book review: Joachim Schummer, *Realismus und Chemie: Philosophische Untersuchungen der Wissenschaft von den Stoffen*. *Foundations of Chemistry*, 2(1):79–84, 2000. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009905108906>.

Scerri:2000:Eb

- [30] Eric R. Scerri. Editorial 5. *Foundations of Chemistry*, 2(2):95–98, May 2000. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009930610570>.

Akeroyd:2000:FMO

- [31] F. Michael Akeroyd. The foundations of modern organic chemistry: The rise of the Highes and Ingold theory from 1930–1942. *Foundations of*

Chemistry, 2(2):99–125, May 2000. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009942227721>.

Needham:2000:ANA

- [32] Paul Needham. Atomic notation and atomistic hypotheses translated by Paul Needham. *Foundations of Chemistry*, 2(2):127–180, May 2000. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009964831496>.

Morrel:2000:BRD

- [33] Jack Morrel. Book review: D. M. Knight and H. Kragh (eds.): *The Making of the Chemist: The Social History of Chemistry in Europe, 1789–1914*. *Foundations of Chemistry*, 2(2):181–185, May 2000. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009906827722>.

Anonymous:2000:CP

- [34] Anonymous. Call for papers. *Foundations of Chemistry*, 2(2):187–188, May 2000. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/A:1017261913227>.

Scerri:2000:Ec

- [35] Eric R. Scerri. Editorial 6. *Foundations of Chemistry*, 2(3):189–194, October 2000. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009959528934>.

Benfey:2000:RPC

- [36] Theodor Benfey. Reflections on the philosophy of chemistry and a rallying call for our discipline. *Foundations of Chemistry*, 2(3):195–205, October 2000. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009946914577>.

Kovac:2000:PEC

- [37] Jeffrey Kovac. Professionalism and ethics in chemistry. *Foundations of Chemistry*, 2(3):207–219, October 2000. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009919031335>.

King:2000:RME

- [38] R. Bruce King. The role of mathematics in the experimental/theoretical/computational trichotomy of chemistry. *Foundations of Chemistry*, 2(3):221–236, October 2000. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009989423317>.

Sneath:2000:NCC

- [39] P. H. A. Sneath. Numerical classification of the chemical elements and its relation to the periodic system. *Foundations of Chemistry*, 2(3):237–263, October 2000. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1009933705492>.

Anonymous:2000:AIV

- [40] Anonymous. Authors index volume 2. *Foundations of Chemistry*, 2(3):265, October 2000. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/A:1017261930265>.

Anonymous:2000:CV

- [41] Anonymous. Contents of volume 2. *Foundations of Chemistry*, 2(3):267–268, October 2000. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/A:1017246613426>.

Scerri:2001:Ea

- [42] Eric R. Scerri. Editorial 7. *Foundations of Chemistry*, 3(1):1–5, ??? 2001. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1011400124413>.

Klein:2001:BFP

- [43] Ursula Klein. Berzelian formulas as paper tools in early Nineteenth-Century chemistry. *Foundations of Chemistry*, 3(1):7–32, ??? 2001. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1011460318779>.

Shanks:2001:MBS

- [44] Niall Shanks. Modeling biological systems: The Belousov–Zhabotinsky reaction. *Foundations of Chemistry*, 3(1):33–53, ??? 2001. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1011434929814>.

Chayut:2001:PGE

- [45] Michael Chayut. From the periphery: the genesis of Eugene P. Wigner's application of group theory to quantum mechanics. *Foundations of Chemistry*, 3(1):55–78, 2001. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1011431408763>.

Psillos:2001:SSR

- [46] Stathis Psillos. Studies in scientific realism. *Foundations of Chemistry*, 3(1):79–86, 2001. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1011403012572>.

Anonymous:2001:ISP

- [47] Anonymous. The International Society for the Philosophy of Chemistry. *Foundations of Chemistry*, 3(1):87–88, 2001. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/A:1017377925321>.

Anonymous:2001:IA

- [48] Anonymous. Instructions for authors. *Foundations of Chemistry*, 3(1):89–96, 2001. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1017328226350>.

Scerri:2001:ESI

- [49] Eric R. Scerri. Editorial 8 — special issue on the periodic system of the elements. *Foundations of Chemistry*, 3(2):97–104, May 2001. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1011443411806>.

Giunta:2001:APS

- [50] Carmen J. Giunta. Argon and the periodic system: the piece that would not fit. *Foundations of Chemistry*, 3(2):105–128, May 2001. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1011464516139>.

Kragh:2001:FSE

- [51] Helge Kragh. The first subatomic explanations of the periodic system. *Foundations of Chemistry*, 3(2):129–143, May 2001. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1011448410646>.

Ostrovsky:2001:WHP

- [52] V. N. Ostrovsky. What and how physics contributes to understanding the periodic law. *Foundations of Chemistry*, 3(2):145–181, May 2001. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1011476405933>.

Scerri:2001:BSS

- [53] Eric R. Scerri and Jacob Edwards. Bibliography of secondary sources on the periodic system of the chemical elements. *Foundations of Chemistry*, 3(2):183–195, May 2001. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1011458803337>.

Scerri:2001:Eb

- [54] Eric R. Scerri. Editorial 9. *Foundations of Chemistry*, 3(3):197–199, October 2001. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1012989418752>.

Seibert:2001:CPH

- [55] Charles Seibert. Charley Peirce’s head start in chemistry. *Foundations of Chemistry*, 3(3):201–226, October 2001. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1012901029626>.

LeVent:2001:WPG

- [56] S. Le Vent. What is a perfect gas mixture? *Foundations of Chemistry*, 3(3):227–239, October 2001. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1012972025303>.

Psarros:2001:LBH

- [57] Nikos Psarros. The lame and the blind, or how much physics does chemistry need? *Foundations of Chemistry*, 3(3):241–249, October 2001. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1012982928838>.

vanBrakel:2001:WUM

- [58] J. van Brakel. The world: An unruly mess. *Foundations of Chemistry*, 3(3):251–262, October 2001. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1012926808391>.

Ramsey:2001:HPN

- [59] Jeffrey L. Ramsey. Hegel's philosophy of nature. *Foundations of Chemistry*, 3(3):263–268, October 2001. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1012932023412>.

Laszlo:2001:SP

- [60] Pierre Laszlo. A sketch of a program. *Foundations of Chemistry*, 3(3):269–271, October 2001. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1012958923716>.

Anonymous:2001:AIV

- [61] Anonymous. Authors index volume 3. *Foundations of Chemistry*, 3(3):273, October 2001. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/A:1017408801856>.

Anonymous:2001:CV

- [62] Anonymous. Contents of volume 3. *Foundations of Chemistry*, 3(3):275–276, October 2001. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/A:1017317629985>.

Scerri:2002:Ea

- [63] Eric R. Scerri. Editorial 10. *Foundations of Chemistry*, 4(1):1–4, 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1014457521660>.

Hentschel:2002:WOM

- [64] Klaus Hentschel. Why not one more imponderable? John William Draper's tithonic rays. *Foundations of Chemistry*, 4(1):5–59, 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1014443008465>.

Kerber:2002:MRH

- [65] Robert C. Kerber. Markovnikov's rule in history and pedagogy. *Foundations of Chemistry*, 4(1):61–72, 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1014479921278>.

Nye:2002:BRN

- [66] Mary Jo Nye. Book review: Nalini Bhushan and Stuart Rosenfeld, eds: *Of Minds and Molecules: New Philosophical Perspectives on Chemistry. Foundations of Chemistry*, 4(1):73–77, ??? 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1014496426735>.

Pence:2002:BRL

- [67] Harry E. Pence. Book review: A. Lundgren and B. Bensaude-Vincent, eds: *Communicating Chemistry: Textbooks and their Audiences, 1789–1929. Foundations of Chemistry*, 4(1):79–81, ??? 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1014479318540>.

Anonymous:2002:CPa

- [68] Anonymous. Call for papers (1). *Foundations of Chemistry*, 4(1):83, ??? 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/A:1017450326453>.

Anonymous:2002:CPb

- [69] Anonymous. Call for papers (2). *Foundations of Chemistry*, 4(1):84, ??? 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/A:1017457710523>.

Anonymous:2002:IAa

- [70] Anonymous. Instructions for authors. *Foundations of Chemistry*, 4(1):85–92, ??? 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1017353113146>.

Scerri:2002:Eb

- [71] Eric R. Scerri. Editorial 11. *Foundations of Chemistry*, 4(2):93–96, May 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1016055204995>.

Jacob:2002:PBR

- [72] Claus Jacob. Philosophy and biochemistry: Research at the interface between chemistry and biology. *Foundations of Chemistry*, 4(2):

97–125, May 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1016052605025>.

Brooks:2002:DPL

- [73] Nathan M. Brooks. Developing the periodic law: Mendeleev’s work during 1869–1871. *Foundations of Chemistry*, 4(2):127–147, May 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1016022129746>.

Cintas:2002:OTC

- [74] Pedro Cintas. On the origin of tetrahedral carbon: A case for philosophy of chemistry? *Foundations of Chemistry*, 4(2):149–161, May 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1016063004499>.

Kovac:2002:TPR

- [75] Jeffrey Kovac. Theoretical and practical reasoning in chemistry. *Foundations of Chemistry*, 4(2):163–171, May 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1016035726186>.

Luna:2002:BRP

- [76] Fernando J. Luna. Book review: Pierre Laszlo: *Miroir de la Chimie*. *Foundations of Chemistry*, 4(2):173–177, May 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1016041703950>.

Scerri:2002:Ec

- [77] Eric R. Scerri. Editorial 12. *Foundations of Chemistry*, 4(3):179–182, October 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1020610630274>.

Luisi:2002:ECC

- [78] Pier Luigi Luisi. Emergence in chemistry: Chemistry as the embodiment of emergence. *Foundations of Chemistry*, 4(3):183–200, October 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1020672005348>.

Eberhart:2002:QMM

- [79] Mark Eberhart. Quantum mechanics and molecular design in the twenty first century. *Foundations of Chemistry*, 4(3):201–211, October 2002. CO-

DEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1020655631654>.

Justi:2002:PCU

- [80] Rosária S. Justi and John K. Gilbert. Philosophy of chemistry in university chemical education: The case of models and modelling. *Foundations of Chemistry*, 4(3):213–240, October 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1020608215725>.

Bloor:2002:BRR

- [81] John E. Bloor. Book review: Ronald J. Gillespie and Paul L. A. Popelier: *Chemical Bonding and Molecular Geometry: From Lewis to Electron Densities*. *Foundations of Chemistry*, 4(3):241–247, October 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1020691330843>.

Anonymous:2002:AIV

- [82] Anonymous. Author index volume 4. *Foundations of Chemistry*, 4(3):249, October 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/A:1020643221655>.

Anonymous:2002:CV

- [83] Anonymous. Contents of volume 4. *Foundations of Chemistry*, 4(3):251–252, October 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/A:1020699623472>.

Anonymous:2002:IAb

- [84] Anonymous. Instructions for authors. *Foundations of Chemistry*, 4(3):253–260, October 2002. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1020647605725>.

Scerri:2003:Ea

- [85] Eric R. Scerri. Editorial 13. *Foundations of Chemistry*, 5(1):1–6, 2003. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1021949109810>.

Vihalemm:2003:LNS

- [86] R. Vihalemm. Are laws of nature and scientific theories peculiar in chemistry? Scrutinizing Mendeleev’s discovery. *Foundations of Chemistry*, 5

(1):7–22, 2003. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1021980526951>. See response [96].

Reiher:2003:STC

- [87] Markus Reiher. A systems theory for chemistry. *Foundations of Chemistry*, 5(1):23–41, 2003. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1021995611796>.

Taber:2003:ACC

- [88] Keith S. Taber. The atom in the chemistry curriculum: Fundamental concept, teaching model or epistemological obstacle? *Foundations of Chemistry*, 5(1):43–84, 2003. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1021995612705>.

Akeroyd:2003:PRP

- [89] Michael Akeroyd. Predictions, retrodictions and the periodic table. *Foundations of Chemistry*, 5(1):85–88, 2003. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1021965027473>.

Kauffman:2003:BRC

- [90] George B. Kauffman and Laurie M. Kauffman. Book review: Carl Djerassi: *An Immaculate Misconception: Sex in an Age of Mechanical Reproduction*. *Foundations of Chemistry*, 5(1):89–91, 2003. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1021926610496>.

Ramsey:2003:UKE

- [91] Jeffrey L. Ramsey. U. Klein (ed.): Tools and modes of representation in the laboratory sciences. *Foundations of Chemistry*, 5(1):93–97, 2003. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1021934727335>.

Anonymous:2003:IAa

- [92] Anonymous. Instructions for authors. *Foundations of Chemistry*, 5(1):99–106, 2003. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1021912932560>.

Scerri:2003:Eb

- [93] Eric R. Scerri. Editorial 14. *Foundations of Chemistry*, 5(2):107–111, May 2003. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1023649307266>.

Paneth:2003:ESC

- [94] F. A. Paneth. The epistemological status of the chemical concept of element. *Foundations of Chemistry*, 5(2):113–145, May 2003. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1023600703644>.

Reiher:2003:STV

- [95] Markus Reiher. The systems-theoretical view of chemical concepts. *Foundations of Chemistry*, 5(2):147–163, May 2003. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1023672816861>.

Christie:2003:CLT

- [96] John R. Christie and Maureen Christie. Chemical laws and theories: A response to Vihalemm. *Foundations of Chemistry*, 5(2):165–174, May 2003. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1023631726532>. See [86].

Ramsey:2003:BRP

- [97] Jeffry L. Ramsey. Book review: P. J. T. Morris and O. T. Benfey (eds.): *Robert Burns Woodward: Architect and Artist in the World of Molecules* (History of Modern Chemical Sciences Series). *Foundations of Chemistry*, 5(2):175–178, May 2003. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1023693730053>.

Hentschel:2003:IRC

- [98] habil. Klaus Hentschel. The instrumental revolution in chemistry. *Foundations of Chemistry*, 5(2):179–183, May 2003. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1023691917565>.

Scerri:2003:Ec

- [99] Eric R. Scerri. Editorial 15. *Foundations of Chemistry*, 5(3):185–188, October 2003. CODEN FOCHF. ISSN 1386-4238 (print), 1572-

8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1025693811263>.

Kaji:2003:MDP

- [100] Masanori Kaji. Mendeleev's discovery of the periodic law: The origin and the reception. *Foundations of Chemistry*, 5(3):189–214, October 2003. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1025673206850>.

Spector:2003:AMR

- [101] Tami I. Spector. The aesthetics of molecular representation: From the empirical to the constitutive. *Foundations of Chemistry*, 5(3):215–236, October 2003. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1025692518934>.

Vancik:2003:PCL

- [102] Hrvoj Vancik. Philosophy of chemistry and limits of complexity. *Foundations of Chemistry*, 5(3):237–247, October 2003. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1025656727195>.

Allin:2003:BRC

- [103] Shawn B. Allin. Book review: Cathy Cobb: *Magick, Mayhem, and Mavericks: The Spirited History of Physical Chemistry*. *Foundations of Chemistry*, 5(3):249–252, October 2003. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1025648701979>.

Needham:2003:BRM

- [104] Paul Needham. Book review: Maureen Christie: *The Ozone Layer. A Philosophy of Science Perspective*. *Foundations of Chemistry*, 5(3):253–261, October 2003. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1025642128618>.

Anonymous:2003:AIV

- [105] Anonymous. Author index volume 5. *Foundations of Chemistry*, 5(3):263, October 2003. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/A:1025651709786>.

Anonymous:2003:CV

- [106] Anonymous. Contents of volume 5. *Foundations of Chemistry*, 5(3):265–266, October 2003. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/A:1025668824808>.

Anonymous:2003:IAb

- [107] Anonymous. Instructions for authors. *Foundations of Chemistry*, 5(3):267–273, October 2003. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/A:1025640107542>.

Scerri:2004:Ea

- [108] Eric R. Scerri. Editorial 16. *Foundations of Chemistry*, 6(1):1–2, ??? 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/B:FOCH.0000021194.71352.22>.

Bhushan:2004:I

- [109] Nalini Bhushan. Introduction. *Foundations of Chemistry*, 6(1):3–9, ??? 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000021170.34287.f7>.

Hoffmann:2004:TC

- [110] Roald Hoffmann. Theoretical chemistry. *Foundations of Chemistry*, 6(1):11, ??? 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/B:FOCH.0000020992.64107.f5>.

Woody:2004:TSW

- [111] Andrea I. Woody. Telltale signs: What common explanatory strategies in chemistry reveal about explanation itself. *Foundations of Chemistry*, 6(1):13–43, ??? 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000020993.09368.b6>.

Weininger:2004:RTS

- [112] Stephen J. Weininger. Response to “telltale signs: What common explanatory strategies in chemistry reveal about explanation itself”. *Foundations of Chemistry*, 6(1):45–48, ??? 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000020994.23928.4d>.

Douglas:2004:PED

- [113] Heather Douglas. Prediction, explanation, and dioxin biochemistry: Science in public policy. *Foundations of Chemistry*, 6(1):49–63, ??? 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000020995.75920.81>.

Wiberg:2004:SSS

- [114] Kenneth B. Wiberg. Strain, structure, stability and reactivity. *Foundations of Chemistry*, 6(1):65–80, ??? 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000020996.34436.71>.

Ramsey:2004:SES

- [115] Jeffrey L. Ramsey. Straining to explain strain and synthesis. *Foundations of Chemistry*, 6(1):81–91, ??? 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000020997.72966.3b>.

Scerri:2004:JHI

- [116] Eric R. Scerri. Just how ab initio is ab initio quantum chemistry? *Foundations of Chemistry*, 6(1):93–116, ??? 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000020998.31689.16>. See comments [117, 149].

Friedrich:2004:LHI

- [117] Bretislav Friedrich. ... hasn't it? A commentary on Eric Scerri's paper "Has Quantum Mechanics Explained the Periodic Table?". *Foundations of Chemistry*, 6(1):117–132, ??? 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000020999.69326.89>. See [116].

Anonymous:2004:CP

- [118] Anonymous. Call for papers. *Foundations of Chemistry*, 6(1):133, ??? 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/B:FOCH.0000021196.65720.cc>.

Scerri:2004:Eb

- [119] Eric R. Scerri. Editorial 17. *Foundations of Chemistry*, 6(2):135–136, May 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463

(electronic). URL <http://link.springer.com/accesspage/article/10.1023/B:FOCH.0000035095.09138.6b>.

Eddy:2004:EPN

- [120] M. D. Eddy. Elements, principles and the narrative of affinity. *Foundations of Chemistry*, 6(2):161–175, May 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000035061.02831.45>.

Laszlo:2004:BRB

- [121] Pierre Laszlo. Book review: *Mapping the Spectrum. Techniques of Visual Representation in Research and Teaching*. *Foundations of Chemistry*, 6(2):177–189, May 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000034991.05140.15>.

Sanchez:2004:BRB

- [122] José Ramón Bertomeu Sánchez. Book review: *Lavoisier in Italia*. *Foundations of Chemistry*, 6(2):191–195, May 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000034990.68395.20>.

Anonymous:2004:Ca

- [123] Anonymous. Corrigendum. *Foundations of Chemistry*, 6(2):197, May 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/B:FOCH.0000035096.25553.8e>.

Earley:2004:WIC

- [124] Joseph E. Earley. Would introductory chemistry courses work better with a new philosophical basis? *Foundations of Chemistry*, 6(3):137–160, October 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000034992.42777.95>.

Scerri:2004:Ec

- [125] Eric R. Scerri. Editorial 18. *Foundations of Chemistry*, 6(3):199–201, October 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000041643.10770.5d>.

Deltete:2004:BRB

- [126] Robert J. Deltete and Anastasios Brenner. Book review: *Pierre Duhem: Mixture and Chemical Combination and Related Essays*. Edited and trans-

lated, with an Introduction, by Paul Needham. *Foundations of Chemistry*, 6(3):203–232, October 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000041548.61723.77>. See response [127].

Needham:2004:MCC

- [127] Paul Needham. Mixture and chemical combination and related essays: A response to Robert Deltete and Anastasios Brenner. *Foundations of Chemistry*, 6(3):233–245, October 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000041549.06984.c3>. See [126].

Kauffman:2004:BRF

- [128] George B. Kauffman and Laurie M. Kauffman. Book review: Fred Basolo: *From Coello to Inorganic Chemistry: A Lifetime of Reactions*. *Foundations of Chemistry*, 6(3):247–250, October 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000041953.83552.86>.

Anonymous:2004:Cb

- [129] Anonymous. Corrigendum. *Foundations of Chemistry*, 6(3):251, October 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/B:FOCH.0000041679.58052.9f>.

Anonymous:2004:AIV

- [130] Anonymous. Author index volume 6. *Foundations of Chemistry*, 6(3):253, October 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/B:FOCH.0000041958.76547.c4>.

Anonymous:2004:CV

- [131] Anonymous. Contents of volume 6. *Foundations of Chemistry*, 6(3):255–257, October 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000041957.11094.3d>.

Anonymous:2004:IA

- [132] Anonymous. Instructions for authors. *Foundations of Chemistry*, 6(3):259–265, October 2004. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000041956.39391.0f>.

Scerri:2005:ESI

- [133] Eric R. Scerri. Editorial 19 special issue on philosophical problems of chemical kinds. *Foundations of Chemistry*, 7(1):1–4, 2005. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000042937.36350.5a>.

Harre:2005:I

- [134] Rom Harré. Introduction. *Foundations of Chemistry*, 7(1):5, 2005. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1023/B:FOCH.0000042884.40307.a5>.

Harre:2005:CKE

- [135] Rom Harré. Chemical kinds and essences revisited. *Foundations of Chemistry*, 7(1):7–30, 2005. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000042885.93975.69>.

Hendry:2005:LME

- [136] Robin Findlay Hendry. Lavoisier and Mendeleev on the elements. *Foundations of Chemistry*, 7(1):31–48, 2005. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000042886.65679.4e>.

Simonian:2005:PCC

- [137] Joseph Simonian. The paradoxes of chemical classification: Why ‘water is H_2O ’ is not an identity statement. *Foundations of Chemistry*, 7(1):49–56, 2005. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000042887.03317.11>.

vanBrakel:2005:IX

- [138] J. van Brakel. On the inventors of XYZ. *Foundations of Chemistry*, 7(1):57–84, 2005. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000042888.33192.2e>.

Earley:2005:WTN

- [139] Joseph E. Earley. Why there is no salt in the sea. *Foundations of Chemistry*, 7(1):85–102, 2005. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000042881.05418.15>.

Needham:2005:MM

- [140] Paul Needham. Mixtures and modality. *Foundations of Chemistry*, 7(1):103–118, 2005. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1023/B:FOCH.0000042889.36764.49>.

Scerri:2005:Ea

- [141] Eric R. Scerri. Editorial 20. *Foundations of Chemistry*, 7(2):119–123, 2005. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-005-0118-5>.

Lombardi:2005:OAC

- [142] Olimpia Lombardi and Martín Labarca. The ontological autonomy of the chemical world. *Foundations of Chemistry*, 7(2):125–148, 2005. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-004-0980-6>. See comment [164].

Wilholt:2005:EMT

- [143] Torsten Wilholt. Explaining models: Theoretical and phenomenological models and their role for the first explanation of the hydrogen spectrum. *Foundations of Chemistry*, 7(2):149–169, 2005. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-004-5958-x>.

Vihalemm:2005:CTM

- [144] Rein Vihalemm. Chemistry and a theoretical model of science: On the occasion of a recent debate with the Christies. *Foundations of Chemistry*, 7(2):171–182, 2005. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-005-0959-y>.

Kauffman:2005:BRF

- [145] George B. Kauffman. Book review: Fathi Habashi: *From Alchemy to Atomic Bombs: History of Chemistry, Metallurgy, and Civilization*. Métallurgie Extractive Québec: 800 rue Alain #504, Sainte Foy, Québec, Canada G1X 4E7, 2002; distributed by Laval University Bookstore “Zone”: Cité Universitaire, Sainte Foy, Québec, Canada G1K 7P4, viii + 357 pp, Can.\$70.00; U.S.\$50.00; plus postage (hardbound); ISBN 2-922686-00-0. *Foundations of Chemistry*, 7(2):183–186, 2005. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-004-5960-3>.

Hendry:2005:BRJ

- [146] Robin Findlay Hendry. Book review: Jaap van Brakel: *Philosophy of Chemistry: Between the Manifest and the Scientific Image* Leuven, University Press, Leuven, 2000, xiv + 246 pp., ISBN 90-5867-063-5. *Foundations of Chemistry*, 7(2):187–197, 2005. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-004-0491-5>.

Scerri:2005:Eb

- [147] Eric R. Scerri. Editorial 21. *Foundations of Chemistry*, 7(3):199–202, October 2005. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-005-4510-y>.

Laing:2005:RPT

- [148] Michael Laing. A revised periodic table: With the lanthanides repositioned. *Foundations of Chemistry*, 7(3):203–233, October 2005. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-004-5959-9>.

Ostrovsky:2005:RDC

- [149] V. N. Ostrovsky. On recent discussion concerning quantum justification of the periodic table of the elements. *Foundations of Chemistry*, 7(3):235–239, October 2005. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-005-2141-y>. See [116, 117].

Novaro:2005:ACD

- [150] Octavio Novaro. Activity of closed d -shells in noble metal atoms. *Foundations of Chemistry*, 7(3):241–268, October 2005. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-004-0787-5>.

Kidwai:2005:GCI

- [151] M. Kidwai and R. Mohan. Green chemistry: An innovative technology. *Foundations of Chemistry*, 7(3):269–287, October 2005. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-004-2783-1>.

Balaban:2005:RAM

- [152] A. T. Balaban. Reflections about mathematical chemistry. *Foundations of Chemistry*, 7(3):289–306, October 2005. CODEN FOCHFL. ISSN

1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-005-0779-0>.

Korobov:2005:SCR

- [153] A. Korobov. Simple chemical reactions in the solid state: Towards elaborating a conception. *Foundations of Chemistry*, 7(3):307–314, October 2005. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-005-7326-x>.

Giunta:2005:BRM

- [154] Carmen Giunta. Book review: Michael D. Gordin: *A Well-Ordered Thing: Dmitrii Mendeleev and the Shadow of the Periodic Table*, Basic Books, New York, 2004, 364 + xx pp., ISBN 0-465-02775-X, \$30. *Foundations of Chemistry*, 7(3):315–319, October 2005. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-005-7201-9>.

Pence:2005:BRM

- [155] Harry E. Pence. Book review: Mark Albert: *Galen's Lectures: A Novel About Chemistry*, Xlibris Corporation, 2000, 493 pp. (ISBN 0-7388-4196-X). *Foundations of Chemistry*, 7(3):321–324, October 2005. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-005-7197-1>.

Anonymous:2005:AIV

- [156] Anonymous. Author index volume 7. *Foundations of Chemistry*, 7(3):325, October 2005. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-005-4509-4>; <http://link.springer.com/article/10.1007/s10698-005-4509-4>.

Anonymous:2005:CV

- [157] Anonymous. Contents of volume 7. *Foundations of Chemistry*, 7(3):327–329, October 2005. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-005-4515-6>.

Anonymous:2005:IA

- [158] Anonymous. Instructions for authors. *Foundations of Chemistry*, 7(3):331–337, October 2005. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-005-4516-5>.

Scerri:2006:Ea

- [159] Eric Scerri. Editorial 22. *Foundations of Chemistry*, 8(1):1–2, February 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-006-9011-0>; <http://link.springer.com/article/10.1007/s10698-006-9011-0>.

Stein:2006:PTE

- [160] Ross L. Stein. A process theory of enzyme catalytic power- the interplay of science and metaphysics. *Foundations of Chemistry*, 8(1):3–29, February 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-005-7907-8>.

Sacks:2006:CPH

- [161] Lawrence J. Sacks. Concerning the position of hydrogen in the periodic table. *Foundations of Chemistry*, 8(1):31–35, February 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-005-9003-5>.

Shahbazian:2006:RON

- [162] Shant Shahbazian and Mansour Zahedi. The role of observables and non-observables in chemistry: A critique of chemical language. *Foundations of Chemistry*, 8(1):37–52, February 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-005-8247-4>.

Schummer:2006:GSM

- [163] Joachim Schummer. Gestalt switch in molecular image perception: The aesthetic origin of molecular nanotechnology in supramolecular chemistry. *Foundations of Chemistry*, 8(1):53–72, February 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-005-3358-5>.

Needham:2006:ORC

- [164] Paul Needham. Ontological reduction: a comment on Lombardi and Labarca. *Foundations of Chemistry*, 8(1):73–80, February 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-005-9002-6>. See [142].

Lombardi:2006:OAC

- [165] Olimpia Lombardi and Martín Labarca. The ontological autonomy of the chemical world: a response to Needham. *Foundations of Chemistry*, 8

(1):81–92, February 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-005-9004-4>.

Scerri:2006:Eb

- [166] Eric Scerri. Editorial 23. *Foundations of Chemistry*, 8(2):93–95, July 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9021-y>.

Labinger:2006:OSN

- [167] Jay A. Labinger. Organized skepticism, naïve methodism, and other-isms. *Foundations of Chemistry*, 8(2):97–110, July 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-004-3531-2>.

Wink:2006:CBP

- [168] Donald J. Wink. Connections between pedagogical and epistemological constructivism: Questions for teaching and research in chemistry. *Foundations of Chemistry*, 8(2):111–151, July 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9008-8>.

deBerg:2006:SCC

- [169] Kevin C. de Berg. The status of constructivism in chemical education research and its relationship to the teaching and learning of the concept of idealization in chemistry. *Foundations of Chemistry*, 8(2):153–176, July 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9010-1>.

Cardellini:2006:FRC

- [170] Liberato Cardellini. The foundations of radical constructivism: An interview with Ernst von Glasersfeld. *Foundations of Chemistry*, 8(2):177–187, July 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9012-z>.

Taber:2006:CNC

- [171] Keith S. Taber. Constructivism’s new clothes: The trivial, the contingent, and a progressive research programme into the learning of science. *Foundations of Chemistry*, 8(2):189–219, July 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-005-4536-1>.

Scerri:2006:Ec

- [172] Eric Scerri. Editorial 24. *Foundations of Chemistry*, 8(3):221–223, October 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9028-4>.

Sharlow:2006:CEP

- [173] M. F. Sharlow. Chemical elements and the problem of universals. *Foundations of Chemistry*, 8(3):225–242, October 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9016-8>.

Forster:2006:CPP

- [174] Leslie S. Forster. Chromium photophysics- a prototypical case history. *Foundations of Chemistry*, 8(3):243–254, October 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9017-7>.

Snooks:2006:ASP

- [175] R. J. Snooks. Another scientific practice separating chemistry from physics: thought experiments. *Foundations of Chemistry*, 8(3):255–270, October 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9019-5>.

Earley:2006:SPI

- [176] Joseph E. Earley, Sr. Some philosophical influences on Ilya Prigogine’s statistical mechanics. *Foundations of Chemistry*, 8(3):271–283, October 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9007-9>.

Scerri:2006:CAK

- [177] Eric R. Scerri. Commentary on Allen & Knight’s response to the Löwdin Challenge. *Foundations of Chemistry*, 8(3):285–292, October 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9009-7>.

Bloor:2006:BR

- [178] John E. Bloor and W. H. Eugen Schwarz. Book review. *Foundations of Chemistry*, 8(3):293–303, October 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9014-x>. See response [179].

King:2006:RDH

- [179] R. B. King and D. H. Rouvray. Response of D. H. Rouvray and R. B. King, Editors of the Book *The Periodic Table: Into the 21st Century. Foundations of Chemistry*, 8(3):305–306, October 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-006-9013-y>; <http://link.springer.com/article/10.1007/s10698-006-9013-y>. See [178].

Pagni:2006:BR

- [180] R. Pagni. Book review. *Foundations of Chemistry*, 8(3):307–310, October 2006. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9015-9>.

Scerri:2007:Ea

- [181] Eric R. Scerri. Editorial 25. *Foundations of Chemistry*, 9(1):1, April 2007. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-007-9031-4>; <http://link.springer.com/article/10.1007/s10698-007-9031-4>.

Deltete:2007:WOEa

- [182] R. J. Deltete. Wilhelm Ostwald’s energetics 1: Origins and motivations. *Foundations of Chemistry*, 9(1):3–56, April 2007. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-005-6707-5>.

Jacob:2007:CDC

- [183] Claus Jacob. The closure of the Department of Chemistry at the University of Exeter — an insider’s view. *Foundations of Chemistry*, 9(1):57–64, April 2007. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9006-x>.

Napinen:2007:NHU

- [184] Leo Näpinen. The need for the historical understanding of nature in physics and chemistry. *Foundations of Chemistry*, 9(1):65–84, April 2007. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9018-6>.

Shahbazian:2007:LEC

- [185] Shant Shahbazian and Mansour Zahedi. Letter to the Editor: The concept of chemical bond- some like it fuzzy but others concrete. *Foundations of Chemistry*, 9(1):85–95, April 2007. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9023-9>.

Giunta:2007:BR

- [186] Carmen J. Giunta. Book review. *Foundations of Chemistry*, 9(1):97–100, April 2007. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9005-y>.

Stemwedel:2007:BR

- [187] Janet D. Stemwedel. Book review. *Foundations of Chemistry*, 9(1):101–114, April 2007. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9024-8>.

Scerri:2007:Eb

- [188] Eric R. Scerri. Editorial 26. *Foundations of Chemistry*, 9(2):115–117, July 2007. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-007-9037-y>.

Rayner-Canham:2007:CKM

- [189] Geoff Rayner-Canham and Megan Oldford. The chemical ‘Knight’s Move’ relationship: what is its significance? *Foundations of Chemistry*, 9(2):119–125, July 2007. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-007-9034-1>.

Laing:2007:WPH

- [190] Michael Laing. Where to put hydrogen in a periodic table? *Foundations of Chemistry*, 9(2):127–137, July 2007. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9027-5>.

Schwarz:2007:RQR

- [191] W. H. Eugen Schwarz. Recommended questions on the road towards a scientific explanation of the periodic system of chemical elements with the help of the concepts of quantum physics. *Foundations of Chemistry*, 9(2):139–188, July 2007. CODEN FOCHF. ISSN 1386-4238 (print),

1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9020-z>.

Restrepo:2007:MAP

- [192] Guillermo Restrepo and Leonardo Pachón. Mathematical aspects of the periodic law. *Foundations of Chemistry*, 9(2):189–214, July 2007. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9026-6>.

Rayner-Canham:2007:BRE

- [193] G. W. Rayner-Canham. Book review: Eric R. Scerri, *The Periodic Table: its Story and its Significance*. *Foundations of Chemistry*, 9(2):215–218, July 2007. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-007-9032-3>.

Scerri:2007:Ec

- [194] Eric Scerri. Editorial 27. *Foundations of Chemistry*, 9(3):219–220, October 2007. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-007-9040-3>; <http://link.springer.com/article/10.1007/s10698-007-9040-3>.

Kibler:2007:MPT

- [195] Maurice R. Kibler. From the Mendeleev periodic table to particle physics and back to the periodic table. *Foundations of Chemistry*, 9(3):221–234, October 2007. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-007-9039-9>.

Stewart:2007:CDM

- [196] Philip J. Stewart. A century on from Dmitrii Mendeleev: tables and spirals, noble gases and Nobel prizes. *Foundations of Chemistry*, 9(3):235–245, October 2007. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-007-9038-x>.

Erduran:2007:BLP

- [197] Sibel Erduran. Breaking the law: promoting domain-specificity in chemical education in the context of arguing about the periodic law. *Foundations of Chemistry*, 9(3):247–263, October 2007. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-007-9036-z>.

Deltete:2007:WOb

- [198] R. J. Deltete. Wilhelm Ostwald's energetics 2: energetic theory and applications, part I. *Foundations of Chemistry*, 9(3):265–316, October 2007. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9025-7>.

Ruthenberg:2007:SCP

- [199] Klaus Ruthenberg. Saving chemical phenomena outside the scientific community. *Foundations of Chemistry*, 9(3):317–320, October 2007. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-007-9030-5>.

Scerri:2008:Ea

- [200] Eric R. Scerri. Editorial 28. *Foundations of Chemistry*, 10(1):1–2, April 2008. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-008-9043-8>; <http://link.springer.com/article/10.1007/s10698-008-9043-8>.

Novaro:2008:RPW

- [201] Octavio Novaro. On the rightful place for He within the periodic table. *Foundations of Chemistry*, 10(1):3–12, April 2008. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-007-9041-2>.

Rayner-Canham:2008:NEA

- [202] Geoff Rayner-Canham and Zheng Zheng. Naming elements after scientists: an account of a controversy. *Foundations of Chemistry*, 10(1):13–18, April 2008. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-007-9042-1>.

Harre:2008:SPM

- [203] Rom Harré. Some presuppositions in the metaphysics of chemical reactions. *Foundations of Chemistry*, 10(1):19–38, April 2008. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-005-9000-8>.

Akeroyd:2008:MEV

- [204] F. Michael Akeroyd. Mechanistic explanation versus deductive-nomological explanation. *Foundations of Chemistry*, 10(1):39–48, April

2008. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-005-9001-7>.

Newman:2008:CS

- [205] Micah Newman. Chemical supervenience. *Foundations of Chemistry*, 10(1):49–62, April 2008. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9029-3>.

Paparazzo:2008:WTC

- [206] Ernesto Paparazzo. Why take chemistry stoically? The case of Posidonius. *Foundations of Chemistry*, 10(1):63–75, April 2008. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-007-9035-0>.

Scerri:2008:Eb

- [207] Eric Scerri. Editorial 29. *Foundations of Chemistry*, 10(2):77–78, July 2008. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-008-9048-3>; <http://link.springer.com/article/10.1007/s10698-008-9048-3>.

Alvarez:2008:BCE

- [208] Santiago Alvarez, Joaquim Sales, and Miquel Seco. On books and chemical elements. *Foundations of Chemistry*, 10(2):79–100, July 2008. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-008-9047-4>.

Hoyningen-Huene:2008:TKC

- [209] Paul Hoyningen-Huene. Thomas Kuhn and the chemical revolution. *Foundations of Chemistry*, 10(2):101–115, July 2008. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-008-9044-7>.

Goodwin:2008:SFE

- [210] W. M. Goodwin. Structural formulas and explanation in organic chemistry. *Foundations of Chemistry*, 10(2):117–127, July 2008. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-007-9033-2>.

Cardellini:2008:VIE

- [211] Liberato Cardellini. The views and influence of Ernst von Glasersfeld: An introduction. *Foundations of Chemistry*, 10(2):129–134, July 2008.

CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-006-9022-x>.

Hetteema:2008:NMW

- [212] Hinne Hetteema. A note on Michael Weisberg's: challenges to the structural conception of chemical bonding. *Foundations of Chemistry*, 10(2): 135–142, July 2008. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-008-9045-6>.

Scerri:2008:Ec

- [213] Eric Scerri. Editorial 30. *Foundations of Chemistry*, 10(3):143, October 2008. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-008-9056-3>; <http://link.springer.com/article/10.1007/s10698-008-9056-3>.

Spector:2008:IE

- [214] Tami I. Spector. ISPC 2007 editorial. *Foundations of Chemistry*, 10(3):145–146, October 2008. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-008-9057-2>; <http://link.springer.com/article/10.1007/s10698-008-9057-2>.

Berson:2008:FTT

- [215] Jerome A. Berson. Fundamental theories and their empirical patches. *Foundations of Chemistry*, 10(3):147–156, October 2008. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-008-9046-5>.

Chalmers:2008:AAN

- [216] Alan F. Chalmers. Atom and aether in nineteenth-century physical science. *Foundations of Chemistry*, 10(3):157–166, October 2008. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-008-9051-8>.

Vemulapalli:2008:TCB

- [217] G. K. Vemulapalli. Theories of the chemical bond and its true nature. *Foundations of Chemistry*, 10(3):167–176, October 2008. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-008-9049-2>.

Goodwin:2008:IIT

- [218] W. M. Goodwin. Implementation and innovation in total synthesis. *Foundations of Chemistry*, 10(3):177–186, October 2008. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-008-9050-9>.

Deltete:2008:Woe

- [219] Robert J. Deltete. Wilhelm Ostwald’s energetics 3: energetic theory and applications, part II. *Foundations of Chemistry*, 10(3):187–221, October 2008. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-008-9053-6>.

Scerri:2009:Ea

- [220] Eric Scerri. Editorial 31. *Foundations of Chemistry*, 11(1):1–2, April 2009. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-009-9068-7>; <http://link.springer.com/content/pdf/10.1007/s10698-009-9068-7.pdf>.

Spector:2009:ISE

- [221] Tami I. Spector. ISPC 2007 second editorial. *Foundations of Chemistry*, 11(1):3–5, April 2009. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-009-9066-9>; <http://link.springer.com/content/pdf/10.1007/s10698-009-9066-9.pdf>.

Sukumar:2009:CCM

- [222] N. Sukumar. The chemist’s concept of molecular structure. *Foundations of Chemistry*, 11(1):7–20, April 2009. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-008-9060-7>.

Salmon:2009:EE

- [223] James Francis Salmon. Emergence in evolution. *Foundations of Chemistry*, 11(1):21–32, April 2009. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-008-9059-0>.

Garcia:2009:DSN

- [224] Pio García. Discovery by serendipity: a new context for an old riddle. *Foundations of Chemistry*, 11(1):33–42, April 2009. CODEN FOCHFL.

ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-008-9061-6>.

Pagni:2009:ODA

- [225] Richard Martin Pagni. The origin and development of the acidity function. *Foundations of Chemistry*, 11(1):43–50, April 2009. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-009-9065-x>.

Tromble:2009:ACS

- [226] Meredith Tromble. The advent of chemical symbolism in the art of Sonya Rapoport. *Foundations of Chemistry*, 11(1):51–60, April 2009. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-008-9058-1>.

Scerri:2009:Eb

- [227] Eric R. Scerri. Editorial 32. *Foundations of Chemistry*, 11(2):61–62, July 2009. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-009-9072-y>; <http://link.springer.com/content/pdf/10.1007/s10698-009-9072-y.pdf>.

Spector:2009:ITE

- [228] Tami I. Spector. ISPC 2007 third editorial. *Foundations of Chemistry*, 11(2):63–64, July 2009. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-009-9073-x>; <http://link.springer.com/content/pdf/10.1007/s10698-009-9073-x.pdf>.

Earley:2009:HCS

- [229] Joseph E. Earley, Sr. How chemistry shifts horizons: element, substance, and the essential. *Foundations of Chemistry*, 11(2):65–77, July 2009. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-008-9054-5>.

Ruthenberg:2009:PKP

- [230] Klaus Ruthenberg. Paneth, Kant, and the philosophy of chemistry. *Foundations of Chemistry*, 11(2):79–91, July 2009. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-009-9064-y>.

Harre:2009:TTO

- [231] Rom Harré. Trope theory and the ontology of chemistry. *Foundations of Chemistry*, 11(2):93–103, July 2009. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-008-9052-7>.

Pagni:2009:WNF

- [232] Richard M. Pagni. The weak nuclear force, the chirality of atoms, and the origin of optically active molecules. *Foundations of Chemistry*, 11(2):105–122, July 2009. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-009-9070-0>.

Rayner-Canham:2009:ISF

- [233] Geoff Rayner-Canham. Isoelectronic series: a fundamental periodic property. *Foundations of Chemistry*, 11(2):123–129, July 2009. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-008-9055-4>.

Scerri:2009:Ec

- [234] Eric R. Scerri. Editorial 33. *Foundations of Chemistry*, 11(3):131–133, October 2009. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-009-9080-y>; <http://link.springer.com/content/pdf/10.1007/s10698-009-9080-y.pdf>.

Sima:2009:ONI

- [235] Jozef Sima. Oxidation number: issues of its determination and range. *Foundations of Chemistry*, 11(3):135–143, October 2009. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-009-9071-z>.

Hettema:2009:ETF

- [236] Hinne Hettema. Explanation and theory formation in quantum chemistry. *Foundations of Chemistry*, 11(3):145–174, October 2009. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-009-9075-8>.

DeKosky:2009:BRW

- [237] Robert K. DeKosky. Book review: William H. Brock: *William Crookes (1832–1919) and the Commercialization of Science*. *Foundations of Chemistry*, 11(3):175–180, October 2009. CODEN FOCHFL. ISSN 1386-

4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-009-9074-9>.

McIntyre:2009:BRE

- [238] Lee McIntyre. Book review: Eric Scerri: *Collected papers on philosophy of chemistry*. *Foundations of Chemistry*, 11(3):181–182, October 2009. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-009-9076-7>; <http://link.springer.com/article/10.1007/s10698-009-9076-7>.

Labarca:2009:BRK

- [239] Martín Labarca and Olimpia Lombardi. Book review: Klaus Ruthenberg and Jaap van Brakel (eds): *Stuff. The nature of chemical substances*. *Foundations of Chemistry*, 11(3):183–186, October 2009. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-009-9077-6>.

Scerri:2010:Ea

- [240] Eric R. Scerri. Editorial 34. *Foundations of Chemistry*, 12(1):1–3, April 2010. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9087-4>; <http://link.springer.com/content/pdf/10.1007/s10698-010-9087-4.pdf>.

Stewart:2010:CJU

- [241] Philip J. Stewart. Charles Janet: unrecognized genius of the periodic system. *Foundations of Chemistry*, 12(1):5–15, April 2010. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-008-9062-5>.

Griffith:2010:GVP

- [242] W. P. Griffith. The group VIII platinum-group metals and the periodic table. *Foundations of Chemistry*, 12(1):17–25, April 2010. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-008-9063-4>.

Laing:2010:QMU

- [243] M. J. Laing. The question mark at uranium. *Foundations of Chemistry*, 12(1):27–30, April 2010. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-009-9067-8>.

Habashi:2010:MTL

- [244] Fathi Habashi. Metals: typical and less typical, transition and inner transition. *Foundations of Chemistry*, 12(1):31–39, April 2010. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-009-9069-6>.

Tobin:2010:MMC

- [245] Emma Tobin. Microstructuralism and macromolecules: the case of moonlighting proteins. *Foundations of Chemistry*, 12(1):41–54, April 2010. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-009-9078-5>.

Linthorst:2010:OOD

- [246] J. A. Linthorst. An overview: origins and development of green chemistry. *Foundations of Chemistry*, 12(1):55–68, April 2010. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-009-9079-4>; <http://link.springer.com/content/pdf/10.1007/s10698-009-9079-4.pdf>

Scerri:2010:EPT

- [247] Eric Scerri. Explaining the periodic table, and the role of chemical triads. *Foundations of Chemistry*, 12(1):69–83, April 2010. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9082-9>.

Marks:2010:NRD

- [248] E. G. Marks and J. A. Marks. Newlands revisited: a display of the periodicity of the chemical elements for chemists. *Foundations of Chemistry*, 12(1):85–93, April 2010. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9083-8>; <http://link.springer.com/content/pdf/10.1007/s10698-010-9083-8.pdf>.

Scerri:2010:Eb

- [249] Eric Scerri. Editorial 35. *Foundations of Chemistry*, 12(2):95–96, October 2010. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9095-4>; <http://link.springer.com/content/pdf/10.1007/s10698-010-9095-4.pdf>.

Ruthenberg:2010:IFE

- [250] K. Ruthenberg. ISPC 2008 first editorial. *Foundations of Chemistry*, 12(2):97–99, October 2010. CODEN FOCHF. ISSN 1386-4238 (print),

1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9096-3>; <http://link.springer.com/content/pdf/10.1007/s10698-010-9096-3.pdf>.

Harre:2010:CCC

- [251] Rom Harré. Causal concepts in chemical vernaculars. *Foundations of Chemistry*, 12(2):101–115, October 2010. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9091-8>.

Akeroyd:2010:PSM

- [252] Michael Akeroyd. The philosophical significance of Mendeleev’s successful predictions of the properties of gallium and scandium. *Foundations of Chemistry*, 12(2):117–122, October 2010. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9085-6>.

vanBrakel:2010:CPN

- [253] J. van Brakel. Chemistry and physics: no need for metaphysical glue. *Foundations of Chemistry*, 12(2):123–136, October 2010. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9084-7>.

Soentgen:2010:HPC

- [254] Jens Soentgen. On the history and prehistory of CO₂. *Foundations of Chemistry*, 12(2):137–148, October 2010. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-009-9081-x>.

Labarca:2010:WOD

- [255] Martín Labarca and Olimpia Lombardi. Why orbitals do not exist? *Foundations of Chemistry*, 12(2):149–157, October 2010. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9086-5>. See critical note [335].

Lombardi:2010:MCP

- [256] Olimpia Lombardi and Mario Castagnino. Matters are not so clear on the physical side. *Foundations of Chemistry*, 12(2):159–166, October 2010. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9090-9>.

Scerri:2010:Ec

- [257] Eric Scerri. Editorial 36. *Foundations of Chemistry*, 12(3):167–169, November 2010. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9099-0>; <http://link.springer.com/content/pdf/10.1007/s10698-010-9099-0.pdf>.

Woods:2010:MMH

- [258] Gordon T. Woods. Mendeleev, the man and his matrix: Dmitri Mendeleev, aspects of his life and work: was he a somewhat fortunate man? *Foundations of Chemistry*, 12(3):171–186, November 2010. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9088-3>.

Boyce:2010:BBL

- [259] Conal Boyce. On the boundary between laboratory ‘givens’ and laboratory ‘tangibles’. *Foundations of Chemistry*, 12(3):187–202, November 2010. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9093-6>; <http://link.springer.com/content/pdf/10.1007/s10698-010-9093-6.pdf>.

Llored:2010:MQC

- [260] Jean-Pierre Llored. Mereology and quantum chemistry: the approximation of molecular orbital. *Foundations of Chemistry*, 12(3):203–221, November 2010. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9092-7>.

Patterson:2010:ALB

- [261] Gary D. Patterson. Les atomes: a landmark book in chemistry. *Foundations of Chemistry*, 12(3):223–233, November 2010. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9098-1>.

Thyssen:2010:BRE

- [262] Pieter Thyssen. Book review: Eric R. Scerri: *Selected papers on the periodic table*. *Foundations of Chemistry*, 12(3):235–238, November 2010. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9089-2>.

Psarros:2010:BRK

- [263] Nikos Psarros. Book review: Klaus Ruthenberg (ed): *Frantisek Wald: Essays 1891–1929*, Wald Press, Prague, 2009, 231 p. *Foundations of Chemistry*, 12(3):239–241, November 2010. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9097-2>.

Scerri:2011:Ea

- [264] Eric R. Scerri. Editorial 37. *Foundations of Chemistry*, 13(1):1–7, April 2011. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9107-z>; <http://link.springer.com/content/pdf/10.1007/s10698-011-9107-z.pdf>. See comment [274].

Anonymous:2011:ISP

- [265] Anonymous. International Society for the Philosophy of Chemistry: summer symposium 2011 in Latin America. *Foundations of Chemistry*, 13(1):9, April 2011. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9109-x>; <http://link.springer.com/content/pdf/10.1007/s10698-011-9109-x.pdf>.

Bader:2011:NEP

- [266] Richard F. W. Bader. On the non-existence of parallel universes in chemistry. *Foundations of Chemistry*, 13(1):11–37, April 2011. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9106-0>.

Healy:2011:HCL

- [267] Eamonn F. Healy. Heisenberg’s chemical legacy: resonance and the chemical bond. *Foundations of Chemistry*, 13(1):39–49, April 2011. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9104-2>.

Pallo:2011:EIQ

- [268] Gabor Pallo. Early impact of quantum physics on chemistry: George Hevesy’s work on rare earth elements and Michael Polanyi’s absorption theory. *Foundations of Chemistry*, 13(1):51–61, April 2011. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9105-1>.

Harre:2011:MGC

- [269] Rom Harré and Jean-Pierre Llored. Mereologies as the grammars of chemical discourses. *Foundations of Chemistry*, 13(1):63–76, April 2011. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9103-3>.

Laing:2011:BRS

- [270] Michael Laing. Book review: Sam Kean: *The disappearing spoon: and other true tales of madness, love, and the history of the world from the periodic table of the elements*. *Foundations of Chemistry*, 13(1):77, April 2011. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9101-x>; <http://link.springer.com/content/pdf/10.1007/s10698-010-9101-x.pdf>.

Earley:2011:BRA

- [271] Joseph E. Earley, Sr. Book review: Alan Chalmers: *The scientist's atom and the philosopher's stone: how science succeeded and philosophy failed to gain knowledge of atoms*. *Foundations of Chemistry*, 13(1):79–83, April 2011. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9102-9>.

Scerri:2011:Eb

- [272] Eric R. Scerri. Editorial 38. *Foundations of Chemistry*, 13(2):85–86, July 2011. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9115-z>; <http://link.springer.com/content/pdf/10.1007/s10698-011-9115-z.pdf>.

Ogilvie:2011:MOM

- [273] J. F. Ogilvie. Is a molecular orbital measurable by means of tomographic imaging? *Foundations of Chemistry*, 13(2):87–91, July 2011. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9113-1>.

Sutcliffe:2011:CE

- [274] Brian T. Sutcliffe and R. Guy Woolley. A comment on “Editorial 37”. *Foundations of Chemistry*, 13(2):93–95, July 2011. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9110-4>. See [264].

Vihalemm:2011:ACO

- [275] Rein Vihalemm. The autonomy of chemistry: old and new problems. *Foundations of Chemistry*, 13(2):97–107, July 2011. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9094-5>.

Kidd:2011:ETK

- [276] R. Garth Kidd. Elements of the third kind and the spin-dependent chemical force. *Foundations of Chemistry*, 13(2):109–119, July 2011. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-010-9100-y>.

Rayner-Canham:2011:IPT

- [277] Geoff Rayner-Canham. Isodiagonality in the periodic table. *Foundations of Chemistry*, 13(2):121–129, July 2011. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9108-y>.

Pagni:2011:DSR

- [278] Richard M. Pagni. Do the solvolysis reactions of secondary substrates occur by the S_N1 or S_N2 mechanism: or something else? *Foundations of Chemistry*, 13(2):131–143, July 2011. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9111-3>.

Fergusson:2011:HDN

- [279] Jack E. Fergusson. The history of the discovery of nuclear fission. *Foundations of Chemistry*, 13(2):145–166, July 2011. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9112-2>.

Hojniak:2011:BRD

- [280] Sandra D. Hojniak. Book review: David E. Fisher: *Much Ado about (Practically) Nothing. A History of the Noble Gases*. *Foundations of Chemistry*, 13(2):167–169, July 2011. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9114-0>.

Scerri:2011:Ec

- [281] Eric Scerri. Editorial 39. *Foundations of Chemistry*, 13(3):171–172, October 2011. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698->

011-9138-5; <http://link.springer.com/content/pdf/10.1007/s10698-011-9138-5.pdf>.

Banchetti-Robino:2011:OTS

- [282] Marina Paola Banchetti-Robino. Ontological tensions in sixteenth and seventeenth century chemistry: between mechanism and vitalism. *Foundations of Chemistry*, 13(3):173–186, October 2011. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9126-9>.

Harre:2011:DEF

- [283] Rom Harré. Do explanation formats in elementary chemistry depend on agent causality? *Foundations of Chemistry*, 13(3):187–200, October 2011. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9120-2>.

Kim:2011:PCC

- [284] Mi Gyung Kim. From phlogiston to caloric: chemical ontologies. *Foundations of Chemistry*, 13(3):201–222, October 2011. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9116-y>.

Rayner-Canham:2011:RAT

- [285] Geoff Rayner-Canham. Relationships among the transition elements. *Foundations of Chemistry*, 13(3):223–232, October 2011. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9117-x>.

Restrepo:2011:CLP

- [286] Guillermo Restrepo and José L. Villaveces. Chemistry, a lingua philosophica. *Foundations of Chemistry*, 13(3):233–249, October 2011. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9123-z>.

Rayner-Canham:2011:BRA

- [287] Marelene Rayner-Canham and Geoff Rayner-Canham. Book review: Anne-Marie Weidler Kubanek: *Nothing less than an adventure: Ellen Gleditsch and her life in science*. *Foundations of Chemistry*, 13(3):251–252, October 2011. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-011-9119-8>; <http://link.springer.com/article/10.1007/s10698-011-9119-8>.

Scerri:2012:Ea

- [288] Eric R. Scerri. Editorial 40. *Foundations of Chemistry*, 14(1):1–2, April 2012. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9148-y>; <http://link.springer.com/content/pdf/10.1007/s10698-012-9148-y.pdf>.

Chalmers:2012:GE

- [289] Alan Chalmers. Guest editorial. *Foundations of Chemistry*, 14(1):3–6, April 2012. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9147-z>; <http://link.springer.com/content/pdf/10.1007/s10698-012-9147-z.pdf>.

Klein:2012:OIC

- [290] Ursula Klein. Objects of inquiry in classical chemistry: material substances. *Foundations of Chemistry*, 14(1):7–23, April 2012. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9122-0>.

Lefevre:2012:VCT

- [291] Wolfgang Lefevre. Viewing chemistry through its ways of classifying. *Foundations of Chemistry*, 14(1):25–36, April 2012. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9125-x>.

Chalmers:2012:KOC

- [292] Alan Chalmers. Klein on the origin of the concept of chemical compound. *Foundations of Chemistry*, 14(1):37–53, April 2012. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9121-1>.

Hendry:2012:CSL

- [293] Robin Findlay Hendry. Chemical substances and the limits of pluralism. *Foundations of Chemistry*, 14(1):55–68, April 2012. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9145-6>.

Scerri:2012:WEW

- [294] Eric R. Scerri. What is an element? What is the periodic table? And what does quantum mechanics contribute to the question? *Foundations*

of *Chemistry*, 14(1):69–81, April 2012. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9124-y>.

Simon:2012:PPP

- [295] Jonathan Simon. The production of purity as the production of knowledge. *Foundations of Chemistry*, 14(1):83–96, April 2012. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9144-7>.

Kauffman:2012:BRBa

- [296] George B. Kauffman. Book review: Bernadette Bensaude-Vincent and Jonathan Simon: *Chemistry, the impure science*. *Foundations of Chemistry*, 14(1):97–98, April 2012. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-011-9132-y>; <http://link.springer.com/article/10.1007/s10698-011-9132-y>.

Kauffman:2012:BRI

- [297] George B. Kauffman. Book review: István Hargittai: *Judging Edward Teller: A closer look at one of the most influential scientists of the twentieth century*. *Foundations of Chemistry*, 14(1):99–101, April 2012. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9133-x>.

Anonymous:2012:ISP

- [298] Anonymous. International Society for the Philosophy of Chemistry (ISPC) — Summer Symposium 2012. *Foundations of Chemistry*, 14(1):103–104, April 2012. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-012-9150-4>; <http://link.springer.com/article/10.1007/s10698-012-9150-4>.

Anonymous:2012:TIC

- [299] Anonymous. Third international conference on the periodic table, Cusco, Peru, 2012. *Foundations of Chemistry*, 14(1):105–106, April 2012. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-012-9149-x>; <http://link.springer.com/article/10.1007/s10698-012-9149-x>.

Scerri:2012:Eb

- [300] Eric Scerri. Editorial 41. *Foundations of Chemistry*, 14(2):107, July 2012. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9157-x>; <http://link.springer.com/content/pdf/10.1007/s10698-012-9157-x.pdf>. See erratum [362].

Thomas:2012:EC

- [301] Gerald F. Thomas. The emancipation of chemistry. *Foundations of Chemistry*, 14(2):109–155, July 2012. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9118-9>.

Martins:2012:RMR

- [302] Roberto de Andrade Martins. The rise of magnetochemistry from Ritter to Hurmuzescu. *Foundations of Chemistry*, 14(2):157–182, July 2012. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9127-8>.

Kauffman:2012:BRK

- [303] George B. Kauffman. Book review: Kenneth J. Klabunde and Ryan M. Richards (Eds): *Nanoscale materials in chemistry*, 2nd edn. *Foundations of Chemistry*, 14(2):183–184, July 2012. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-011-9131-z>; <http://link.springer.com/article/10.1007/s10698-011-9131-z>.

Kauffman:2012:BRA

- [304] George B. Kauffman. Book review: Alexander Y. Grosberg and Alexei R. Khokhlov: *Giant molecules: here, there, and everywhere*, 2nd edn. *Foundations of Chemistry*, 14(2):185–186, July 2012. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-011-9134-9>; <http://link.springer.com/article/10.1007/s10698-011-9134-9>.

Kauffman:2012:BRBb

- [305] George B. Kauffman. Book review: Bob B. He: *Two-dimensional X-ray diffraction*. *Foundations of Chemistry*, 14(2):187–188, July 2012. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-011-9135-8>; <http://link.springer.com/article/10.1007/s10698-011-9135-8>.

Scerri:2012:Ec

- [306] Eric Scerri. Editorial 42. *Foundations of Chemistry*, 14(3):189–190, October 2012. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-012-9167-8>; <http://link.springer.com/article/10.1007/s10698-012-9167-8>.

Harre:2012:I

- [307] Rom Harré. Introduction. *Foundations of Chemistry*, 14(3):191, October 2012. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9162-0>; <http://link.springer.com/content/pdf/10.1007/s10698-012-9162-0.pdf>.

Ruthenberg:2012:PCI

- [308] Klaus Ruthenberg and Rom Harré. Philosophy of chemistry as intercultural philosophy: Jaap van Brakel. *Foundations of Chemistry*, 14(3):193–203, October 2012. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9161-1>.

Lombardi:2012:PMV

- [309] Olimpia Lombardi. Prigogine and the many voices of nature. *Foundations of Chemistry*, 14(3):205–219, October 2012. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9140-y>.

Banchetti-Robino:2012:OFF

- [310] Marina Paola Banchetti-Robino. The ontological function of first-order and second-order corpuscles in the chemical philosophy of Robert Boyle: the reintegration of potassium nitrate. *Foundations of Chemistry*, 14(3):221–234, October 2012. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9159-8>.

Earley:2012:NAP

- [311] Joseph E. Earley, Sr. A neglected aspect of the puzzle of chemical structure: how history helps. *Foundations of Chemistry*, 14(3):235–243, October 2012. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9146-0>.

Llored:2012:EQC

- [312] Jean-Pierre Llored. Emergence and quantum chemistry. *Foundations of Chemistry*, 14(3):245–274, October 2012. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9163-z>.

Scerri:2012:CWV

- [313] Eric R. Scerri. A critique of Weisberg’s view on the periodic table and some speculations on the nature of classifications. *Foundations of Chemistry*, 14(3):275–284, October 2012. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9164-y>.

Scerri:2013:Ea

- [314] Eric Scerri. Editorial 43. *Foundations of Chemistry*, 15(1):1–2, April 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9188-y>; <http://link.springer.com/content/pdf/10.1007/s10698-013-9188-y.pdf>.

Nelson:2013:WM

- [315] Peter G. Nelson. What is the mole? *Foundations of Chemistry*, 15(1):3–11, April 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9185-1>.

Leach:2013:CEB

- [316] Mark R. Leach. Concerning electronegativity as a basic elemental property and why the periodic table is usually represented in its medium form. *Foundations of Chemistry*, 15(1):13–29, April 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9151-3>.

Marchese:2013:PVD

- [317] Francis T. Marchese. Periodicity, visualization, and design. *Foundations of Chemistry*, 15(1):31–55, April 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9154-0>.

Sima:2013:RRI

- [318] Jozef Sima. Redox reactions: inconsistencies in their description. *Foundations of Chemistry*, 15(1):57–64, April 2013. CODEN FOCHFL. ISSN

1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9143-8>.

Lewowicz:2013:SVI

- [319] Lucía Lewowicz and Olimpia Lombardi. Stuff versus individuals. *Foundations of Chemistry*, 15(1):65–77, April 2013. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9152-2>.

Sarikaya:2013:VAS

- [320] Mustafa Sarikaya. A view about the short histories of the mole and Avogadro's number. *Foundations of Chemistry*, 15(1):79–91, April 2013. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9128-7>.

Blumenthal:2013:KCR

- [321] Geoffrey Blumenthal. Kuhn and the chemical revolution: a re-assessment. *Foundations of Chemistry*, 15(1):93–101, April 2013. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9129-6>.

Gomez:2013:SCE

- [322] Pedro J. Sánchez Gómez. The semantics of chemical education: constructivism, externalism and the language of chemistry. *Foundations of Chemistry*, 15(1):103–116, April 2013. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9130-0>.

Kauffman:2013:BRR

- [323] George B. Kauffman. Book review: Richard P. Pohanish and Stanley A. Greene: *Wiley guide to chemical incompatibilities*, 3rd edn. *Foundations of Chemistry*, 15(1):117, April 2013. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-011-9136-7>; <http://link.springer.com/content/pdf/10.1007/s10698-011-9136-7.pdf>.

Kauffman:2013:BRB

- [324] George B. Kauffman. Book review: Bassam Z. Shakhshiri: *Chemical demonstrations: a handbook for teachers of chemistry*, Volume 5. *Foundations of Chemistry*, 15(1):119–120, April 2013. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-011-9137-6>; <http://link.springer.com/article/10.1007/s10698-011-9137-6>.

Kauffman:2013:BRT

- [325] George B. Kauffman. Book review: Thomas B. Rauchfuss, Editor-in-Chief: *Inorganic Syntheses*, Volume 35. *Foundations of Chemistry*, 15(1):121–122, April 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-011-9139-4>; <http://link.springer.com/article/10.1007/s10698-011-9139-4>.

Scerri:2013:Eb

- [326] Eric Scerri. Editorial 44. *Foundations of Chemistry*, 15(2):123, July 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9191-3>; <http://link.springer.com/content/pdf/10.1007/s10698-013-9191-3.pdf>.

Restrepo:2013:E

- [327] Guillermo Restrepo. Editorial. *Foundations of Chemistry*, 15(2):125–126, July 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9180-6>; <http://link.springer.com/content/pdf/10.1007/s10698-013-9180-6.pdf>.

Harre:2013:MM

- [328] Rom Harré and Jean-Pierre Llored. Molecules and mereology. *Foundations of Chemistry*, 15(2):127–144, July 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9181-5>.

Rocke:2013:WDT

- [329] Alan Rocke. What did “theory” mean to nineteenth-century chemists? *Foundations of Chemistry*, 15(2):145–156, July 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9184-2>. See comments [359] and response [360].

Chamizo:2013:TOC

- [330] José Antonio Chamizo. Technochemistry: One of the chemists’ ways of knowing. *Foundations of Chemistry*, 15(2):157–170, July 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9179-z>.

Mahootian:2013:PEC

- [331] Farzad Mahootian. Paneth's epistemology of chemical elements in light of Kant's *Opus postumum*. *Foundations of Chemistry*, 15(2):171–184, July 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9182-4>.

Restrepo:2013:MMC

- [332] Guillermo Restrepo. To mathematize, or not to mathematize chemistry. *Foundations of Chemistry*, 15(2):185–197, July 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9183-3>.

Nelson:2013:PFC

- [333] Peter G. Nelson. Periodicity in the formulae of carbonyls and the electronic basis of the periodic table. *Foundations of Chemistry*, 15(2):199–208, July 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9155-z>.

Gilead:2013:STQ

- [334] Amihud Gilead. Shechtman's three question marks: possibility, impossibility, and quasicrystals. *Foundations of Chemistry*, 15(2):209–224, July 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9156-y>.

Manafu:2013:IRP

- [335] Alexandru Manafu. Internal realism and the problem of ontological autonomy: a critical note on Lombardi and Labarca. *Foundations of Chemistry*, 15(2):225–228, July 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9165-x>. See [255].

Rayner-Canham:2013:PPG

- [336] Geoff Rayner-Canham. Periodic patterns: the group (n) and group ($n+10$) linkage. *Foundations of Chemistry*, 15(2):229–237, July 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9169-6>.

Kauffman:2013:BRG

- [337] George B. Kauffman. Book review: George A. Olah, Alain Goeppert and G. K. Surya Prakash (eds): *Beyond oil and gas: the methanol*

economy, 2nd updated and enlarged edition. *Foundations of Chemistry*, 15(2):239–240, July 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-011-9141-x>; <http://link.springer.com/article/10.1007/s10698-011-9141-x>.

Kauffman:2013:BRH

- [338] George B. Kauffman. Book review: Herbert W. Roesky and Dietmar K. Kennepohl (eds): *Experiments in green and sustainable chemistry*. *Foundations of Chemistry*, 15(2):241–242, July 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-011-9142-9>; <http://link.springer.com/article/10.1007/s10698-011-9142-9>.

Scerri:2013:Ec

- [339] Eric Scerri. Editorial 45. *Foundations of Chemistry*, 15(3):243, October 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9195-z>; <http://link.springer.com/content/pdf/10.1007/s10698-013-9195-z.pdf>.

Matta:2013:SIP

- [340] Chérif F. Matta. Special issue: Philosophical aspects and implications of the quantum theory of atoms in molecules (QTAIM). *Foundations of Chemistry*, 15(3):245–251, October 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9194-0>; <http://link.springer.com/content/pdf/10.1007/s10698-013-9194-0.pdf>.

Bader:2013:AMN

- [341] Richard F. W. Bader and Chérif F. Matta. Atoms in molecules as non-overlapping, bounded, space-filling open quantum systems. *Foundations of Chemistry*, 15(3):253–276, October 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9153-1>.

Eberhart:2013:TFC

- [342] Mark E. Eberhart and Travis E. Jones. The two faces of chemistry: can they be reconciled? *Foundations of Chemistry*, 15(3):277–285, October 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9172-y>.

Shahbazian:2013:BOQ

- [343] Shant Shahbazian. Beyond the orthodox QTAIM: motivations, current status, prospects and challenges. *Foundations of Chemistry*, 15(3):287–302, October 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9170-0>.

Sukumar:2013:AMM

- [344] N. Sukumar. The atom in a molecule as a mereological construct in chemistry. *Foundations of Chemistry*, 15(3):303–309, October 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9171-z>.

Hettema:2013:AQM

- [345] Hinne Hettema. Austere quantum mechanics as a reductive basis for chemistry. *Foundations of Chemistry*, 15(3):311–326, October 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9173-x>. See comment [346].

Shahbazian:2013:CAQ

- [346] Shant Shahbazian. Comment on “Austere quantum mechanics as a reductive basis for chemistry”. *Foundations of Chemistry*, 15(3):327–334, October 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9177-6>. See [345] and reply [347].

Hettema:2013:QRP

- [347] Hinne Hettema. QTAIM as a research programme: a reply to Shahbazian. *Foundations of Chemistry*, 15(3):335–341, October 2013. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9193-1>. See [346].

Scerri:2014:Ea

- [348] Eric R. Scerri. Editorial 46. *Foundations of Chemistry*, 16(1):1–2, April 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-014-9202-z>; <http://link.springer.com/content/pdf/10.1007/s10698-014-9202-z.pdf>.

Causa:2014:ABM

- [349] Mauro Causá, Andreas Savin, and Bernard Silvi. Atoms and bonds in molecules and chemical explanations. *Foundations of Chemistry*, 16(1):

3–26, April 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9192-2>.

Nalewajski:2014:ECE

- [350] Roman F. Nalewajski. Entropic concepts in electronic structure theory. *Foundations of Chemistry*, 16(1):27–62, April 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9168-7>; <http://link.springer.com/content/pdf/10.1007/s10698-012-9168-7.pdf>

Joy pazadeh:2014:WDS

- [351] Hamidreza Joy pazadeh and Shant Shahbazian. What does shape a topological atom? *Foundations of Chemistry*, 16(1):63–75, April 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9186-0>.

Shahbazian:2014:LET

- [352] Shant Shahbazian. Letter to the editor: Are there “really” atoms in molecules? *Foundations of Chemistry*, 16(1):77–84, April 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9187-z>.

Scerri:2014:Eb

- [353] Eric Scerri. Editorial 47. *Foundations of Chemistry*, 16(2):85–86, July 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-014-9210-z>; <http://link.springer.com/content/pdf/10.1007/s10698-014-9210-z.pdf>.

Ramirez-Solis:2014:FMM

- [354] Alejandro Ramírez-Solís and Octavio Novaro. The first metals in Mendeleiev’s table: further arguments to place He above Ne and not above be. *Foundations of Chemistry*, 16(2):87–91, July 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9174-9>.

Boyce:2014:ULD

- [355] Conal Boyce. Using logic to define the Aufbau–Hund–Pauli relation: a guide to teaching orbitals as a single, natural, unfragmented rule-set. *Foundations of Chemistry*, 16(2):93–106, July 2014. CODEN

FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9176-7>; <http://link.springer.com/content/pdf/10.1007/s10698-012-9176-7.pdf> ■

Villani:2014:SSC

- [356] Giovanni Villani. Structured system in chemistry: comparison with mechanics and biology. *Foundations of Chemistry*, 16(2):107–123, July 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9178-0>.

Marques:2014:ESI

- [357] Carlos Alberto Marques and Adélio A. S. C. Machado. Environmental sustainability: implications and limitations to green chemistry. *Foundations of Chemistry*, 16(2):125–147, July 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9189-x>.

Gilead:2014:PPS

- [358] Amihud Gilead. Pure possibilities and some striking scientific discoveries. *Foundations of Chemistry*, 16(2):149–163, July 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9190-4>.

Needham:2014:NCC

- [359] Paul Needham. Nineteenth-century chemical theory: correction of a misunderstanding. *Foundations of Chemistry*, 16(2):165–167, July 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9198-9>. See [329] and response [360].

Rocke:2014:RLE

- [360] Alan Rocke. Response to a letter to the editor. *Foundations of Chemistry*, 16(2):169–170, July 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-013-9199-8>; <http://link.springer.com/article/10.1007/s10698-013-9199-8>. See [359, 329].

Kauffman:2014:BR Ea

- [361] George B. Kauffman. Book review: Eric R. Scerri: *The periodic table: a very short introduction*. *Foundations of Chemistry*, 16(2):171–172, July 2014. CODEN FOCHFL. ISSN 1386-4238

(print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-014-9206-8>; <http://link.springer.com/article/10.1007/s10698-014-9206-8>.

Scerri:2014:EE

- [362] Eric Scerri. Erratum to: Editorial 41. *Foundations of Chemistry*, 16(2):173, July 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-012-9166-9>; <http://link.springer.com/content/pdf/10.1007/s10698-012-9166-9.pdf>. See [300].

Scerri:2014:Ec

- [363] Eric R. Scerri. Editorial 48. *Foundations of Chemistry*, 16(3):175, October 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-014-9213-9>; <http://link.springer.com/content/pdf/10.1007/s10698-014-9213-9.pdf>.

Hernandez:2014:FMM

- [364] Raymundo Hernández and Octavio Novaro. The first metals in Mendeleiev's table: Part II. A new argument against the placement of hydrogen atop the alkali metal column. *Foundations of Chemistry*, 16(3):177–180, October 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9196-y>.

Lombardi:2014:LCP

- [365] Olimpia Lombardi. Linking chemistry with physics: arguments and counterarguments. *Foundations of Chemistry*, 16(3):181–192, October 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-013-9197-x>. See reply [366].

Hettema:2014:LCP

- [366] Hinne Hettema. Linking chemistry with physics: a reply to Lombardi. *Foundations of Chemistry*, 16(3):193–200, October 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-014-9200-1>. See [365].

Gilead:2014:CRI

- [367] Amihud Gilead. Chain reactions, “impossible” reactions, and panenmentalist possibilities. *Foundations of Chemistry*, 16(3):201–214, October 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (elec-

tronic). URL <http://link.springer.com/article/10.1007/s10698-014-9201-0>.

Bengoetxea:2014:SRC

- [368] Juan Bautista Bengoetxea, Oliver Todt, and José Luis Luján. Similarity and representation in chemical knowledge practices. *Foundations of Chemistry*, 16(3):215–233, October 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-014-9203-y>.

Imyanitov:2014:ANF

- [369] Naum S. Imyanitov. Adequacy of the new formulation of the periodic law when fundamental variations occur in blocks and periods. *Foundations of Chemistry*, 16(3):235–247, October 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-014-9204-x>.

Kauffman:2014:BRU

- [370] George B. Kauffman. Book review: Ulf Lagerkvist: Erling Norrby (ed.): *The periodic table and a missed Nobel Prize*. *Foundations of Chemistry*, 16(3):249–251, October 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-014-9205-9>.

Kauffman:2014:BR Eb

- [371] George B. Kauffman. Book review: Eric Scerri: *A tale of 7 elements*. *Foundations of Chemistry*, 16(3):253–256, October 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-014-9207-7>.

Kauffman:2014:BR Ec

- [372] George B. Kauffman. Book review: Eric Scerri (ed): *30-Second elements: the 50 most significant elements, each explained in half a minute*. *Foundations of Chemistry*, 16(3):257–258, October 2014. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-014-9208-6>; <http://link.springer.com/article/10.1007/s10698-014-9208-6>.

Scerri:2015:Ea

- [373] Eric Scerri. Editorial 49. *Foundations of Chemistry*, 17(1):1–3, April 2015. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9230-3>; <http://link.springer.com/content/pdf/10.1007/s10698-015-9230-3.pdf>.

Maar:2015:BCA

- [374] Juergen Heinrich Maar and Eder João Lenardão. The Brazilian contribution of Alcindo Flores Cabral to the periodic classification. *Foundations of Chemistry*, 17(1):5–22, April 2015. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9223-2>.

Jensen:2015:PLA

- [375] William B. Jensen. The positions of lanthanum (actinium) and lutetium (lawrencium) in the periodic table: an update. *Foundations of Chemistry*, 17(1):23–31, April 2015. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9216-1>.

deBerg:2015:FCE

- [376] Kevin Charles de Berg. Foundations of and challenges to electrolyte chemistry. *Foundations of Chemistry*, 17(1):33–48, April 2015. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9219-y>.

Garcia:2015:CSE

- [377] Pio Garcia. Computer simulations and experiments: in vivo-in vitro conditions in biochemistry. *Foundations of Chemistry*, 17(1):49–65, April 2015. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9215-2>.

DiGiacomo:2015:SCM

- [378] Francesco Di Giacomo. On some characteristics of Marcus' work in the light of the history of science. *Foundations of Chemistry*, 17(1):67–78, April 2015. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9222-3>.

Rulev:2015:PNB

- [379] Alexander Yu. Rulev. Pegniochemistry as a new branch of the chemical science. *Foundations of Chemistry*, 17(1):79–86, April 2015. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9214-3>.

Pallo:2015:BRJ

- [380] Gábor Palló. Book review: Jean-Pierre Llored (ed.): *The philosophy of chemistry: practices, methodologies, and concepts*. *Foundations of Chemistry*, 17(1):87–89, April 2015. CODEN FOCHF. ISSN 1386-4238 (print),

1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-014-9209-5>.

Scerri:2015:Eb

- [381] Eric Scerri. Editorial 50. *Foundations of Chemistry*, 17(2):91–92, July 2015. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9232-1>; <http://link.springer.com/content/pdf/10.1007/s10698-015-9232-1.pdf>.

Barragan:2015:EKT

- [382] Daniel Barragán. Essentials of kinetics and thermodynamics for understanding chemical oscillations. *Foundations of Chemistry*, 17(2):93–106, July 2015. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9221-4>.

Moretti:2015:ERP

- [383] Giuliano Moretti. The "extent of reaction": a powerful concept to study chemical transformations at the first-year general chemistry courses. *Foundations of Chemistry*, 17(2):107–115, July 2015. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-014-9212-x>.

Gambini:2015:QMS

- [384] Rodolfo Gambini, Lucía Lewowicz, and Jorge Pullin. Quantum mechanics, strong emergence and ontological non-reducibility. *Foundations of Chemistry*, 17(2):117–127, July 2015. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9224-1>.

Khalilov:2015:SIC

- [385] Leonard M. Khalilov. Symmetry, inertness and chirality in theory of chiral systems. *Foundations of Chemistry*, 17(2):129–135, July 2015. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9231-2>.

Best:2015:LRP

- [386] Nicholas W. Best. Lavoisier's "reflections on phlogiston" I: against phlogiston theory. *Foundations of Chemistry*, 17(2):137–151, July 2015. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9220-5>.

Nelson:2015:MVL

- [387] Peter G. Nelson. A modern version of Lewis's theory of valency. *Foundations of Chemistry*, 17(2):153–162, July 2015. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9217-0>. See erratum [404].

Tangde:2015:AHC

- [388] Vijay M. Tangde. Advances in hadronic chemistry and its applications. *Foundations of Chemistry*, 17(2):163–179, July 2015. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9218-z>.

Scerri:2015:Ec

- [389] Eric Scerri. Editorial 51. *Foundations of Chemistry*, 17(3):181, October 2015. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9239-7>; <http://link.springer.com/content/pdf/10.1007/s10698-015-9239-7.pdf>.

Llored:2015:GE

- [390] Jean-Pierre Llored. Guest editorial. *Foundations of Chemistry*, 17(3):183–185, October 2015. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9240-1>; <http://link.springer.com/content/pdf/10.1007/s10698-015-9240-1.pdf>.

Schaming:2015:NAT

- [391] Delphine Schaming and Hynd Remita. Nanotechnology: from the ancient time to nowadays. *Foundations of Chemistry*, 17(3):187–205, October 2015. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9235-y>.

Laurent:2015:OPE

- [392] Brice Laurent. Operations for a problem of existence: dealing with the ontological uncertainty of nano substances. *Foundations of Chemistry*, 17(3):207–224, October 2015. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9233-0>.

Lacour:2015:DRC

- [393] Stéphanie Lacour, Sacha Loeve, Brice Laurent, and Virginie Albe. De-liberating responsibility: a collective contribution by the C'Nano IdF

Nanoscience & Society Office. *Foundations of Chemistry*, 17(3):225–245, October 2015. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9234-z>.

Boeyens:2015:WMM

- [394] Jan C. A. Boeyens. Wave-mechanical model for chemistry. *Foundations of Chemistry*, 17(3):247–262, October 2015. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9225-0>.

Hartman:2015:DWN

- [395] JudithAnn R. Hartman and Eric A. Nelson. “Do we need to memorize that?” or cognitive science for chemists. *Foundations of Chemistry*, 17(3):263–274, October 2015. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9226-z>.

Downward:2015:SRT

- [396] Michael Downward. Symmetry and representation in a three dimensional space. *Foundations of Chemistry*, 17(3):275–287, October 2015. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9227-y>.

Scerri:2016:Ea

- [397] Eric Scerri. Editorial 52. *Foundations of Chemistry*, 18(1):1–2, April 2016. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-016-9254-3>; <http://link.springer.com/content/pdf/10.1007/s10698-016-9254-3.pdf>.

Best:2016:LRP

- [398] Nicholas W. Best. Lavoisier’s “reflections on phlogiston” II: on the nature of heat. *Foundations of Chemistry*, 18(1):3–13, April 2016. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9236-x>.

Nelson:2016:ITR

- [399] Peter G. Nelson. Introducing the theory of relativity. *Foundations of Chemistry*, 18(1):15–19, April 2016. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9247-7>; <http://link.springer.com/content/pdf/10.1007/s10698-015-9247-7.pdf>.

Imyanitov:2016:DSC

- [400] Naum S. Imyanitov. Dialectics and synergetics in chemistry. Periodic Table and oscillating reactions. *Foundations of Chemistry*, 18(1):21–56, April 2016. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9248-6>.

Salehzadeh:2016:SWO

- [401] Sadegh Salehzadeh and Farahnaz Maleki. The 4s and 3d subshells: Which one fills first in progressing through the periodic table and which one fills first in any particular atom? *Foundations of Chemistry*, 18(1):57–65, April 2016. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-016-9249-0>.

Sima:2016:SRM

- [402] Jozef Sima. Structure-related melting and boiling points of inorganic compounds. *Foundations of Chemistry*, 18(1):67–79, April 2016. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9228-x>.

Llored:2016:KGA

- [403] Jean-Pierre Llored. Book review: Kostas Gavroglu and Ana Simões: *Neither physics nor chemistry. A history of quantum chemistry*. *Foundations of Chemistry*, 18(1):81–84, April 2016. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-014-9211-y>.

Nelson:2016:EMV

- [404] Peter G. Nelson. Erratum to: A modern version of Lewis’s theory of valency. *Foundations of Chemistry*, 18(1):85, April 2016. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9238-8>; <http://link.springer.com/content/pdf/10.1007/s10698-015-9238-8.pdf>. See [387].

Scerri:2016:Eb

- [405] Eric R. Scerri. Editorial 53. *Foundations of Chemistry*, 18(2):87, July 2016. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-016-9256-1>; <http://link.springer.com/content/pdf/10.1007/s10698-016-9256-1.pdf>.

Harre:2016:RTP

- [406] Rom Harré. Realism and the turn to practice. *Foundations of Chemistry*, 18(2):89, July 2016. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9245-9>; <http://link.springer.com/content/pdf/10.1007/s10698-015-9245-9.pdf>.

Vihalemm:2016:CPP

- [407] Rein Vihalemm. Chemistry and the problem of pluralism in science: an analysis concerning philosophical and scientific disagreements. *Foundations of Chemistry*, 18(2):91–102, July 2016. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9241-0>.

Banchetti-Robino:2016:VHH

- [408] Marina Paola Banchetti-Robino. Van Helmont’s hybrid ontology and its influence on the chemical interpretation of spirit and ferment. *Foundations of Chemistry*, 18(2):103–112, July 2016. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9243-y>.

Muursepp:2016:CPSa

- [409] Peeter Müürsepp. Chemistry as a practical science: Edward Caldin revisited. *Foundations of Chemistry*, 18(2):113–123, July 2016. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9244-x>.

Llored:2016:CPC

- [410] Jean-Pierre Llored and Stéphane Sarrade. Connecting the philosophy of chemistry, green chemistry, and moral philosophy. *Foundations of Chemistry*, 18(2):125–152, July 2016. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9242-z>.

Imyanitov:2016:SFG

- [411] Naum S. Imyanitov. Spiral as the fundamental graphic representation of the Periodic Law. Blocks of elements as the autonomic parts of the Periodic System. *Foundations of Chemistry*, 18(2):153–173, July 2016. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-015-9246-8>.

Kauffman:2016:AHZ

- [412] George B. Kauffman and Laurie M. Kauffman. Ahmed H. Zewail: 4D visualization of matter: recent collected works. *Foundations of Chemistry*, 18(2):175–176, July 2016. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-015-9237-9>; <http://link.springer.com/article/10.1007/s10698-015-9237-9>.

Scerri:2016:Ec

- [413] Eric Scerri. Editorial 54. *Foundations of Chemistry*, 18(3):177–178, October 2016. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-016-9261-4>; <http://link.springer.com/content/pdf/10.1007/s10698-016-9261-4.pdf>.

Siderer:2016:MPM

- [414] Yona Siderer. In memory of Professor Masanori Kaji (8 February 1956–18 July 2016). *Foundations of Chemistry*, 18(3):179–181, October 2016. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-016-9262-3>; <http://link.springer.com/article/10.1007/s10698-016-9262-3>.

Gilead:2016:EEC

- [415] Amihud Gilead. Eka-elements as chemical pure possibilities. *Foundations of Chemistry*, 18(3):183–194, October 2016. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-016-9250-7>; <http://link.springer.com/article/10.1007/s10698-016-9250-7>.

Weinstein:2016:PTM

- [416] Mark Weinstein. The periodic table and the model of emerging truth. *Foundations of Chemistry*, 18(3):195–212, October 2016. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-016-9252-5>; <http://link.springer.com/article/10.1007/s10698-016-9252-5>.

Muursepp:2016:CPSb

- [417] Peeter Mürsepp. Chemistry as a practical science (Edward Caldin revisited). *Foundations of Chemistry*, 18(3):213–223, October 2016. CODEN

FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-016-9257-0>; <http://link.springer.com/article/10.1007/s10698-016-9257-0>.

Fortin:2016:ID

- [418] Sebastian Fortin, Olimpia Lombardi, and Juan Camilo Martínez González. Isomerism and decoherence. *Foundations of Chemistry*, 18(3):225–240, October 2016. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-016-9251-6>; <http://link.springer.com/article/10.1007/s10698-016-9251-6>.

Fisher:2016:DCO

- [419] Grant Fisher. Diagnostics in computational organic chemistry. *Foundations of Chemistry*, 18(3):241–262, October 2016. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-016-9253-4>; <http://link.springer.com/article/10.1007/s10698-016-9253-4>.

Scerri:2017:Ea

- [420] Eric Scerri. Editorial 55. *Foundations of Chemistry*, 19(1):1, April 2017. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-017-9279-2>; <http://link.springer.com/content/pdf/10.1007/s10698-017-9279-2.pdf>.

Banchetti-Robino:2017:GEa

- [421] Marina P. Banchetti-Robino. Guest editorial. *Foundations of Chemistry*, 19(1):3–4, April 2017. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/article/10.1007/s10698-017-9276-5>; <http://link.springer.com/content/pdf/10.1007/s10698-017-9276-5.pdf>.

DeLanda:2017:RHC

- [422] Manuel DeLanda. Realism and the history of chemistry. *Foundations of Chemistry*, 19(1):5–15, April 2017. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-017-9274-7>; <http://link.springer.com/article/10.1007/s10698-017-9274-7>.

Fisher:2017:CDR

- [423] Grant Fisher. Content, design, and representation in chemistry. *Foundations of Chemistry*, 19(1):17–28, April 2017. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-017-9275-6>; <http://link.springer.com/article/10.1007/s10698-017-9275-6>.

Prentner:2017:CCO

- [424] Robert Prentner. Chemistry, context and the objects of thought. *Foundations of Chemistry*, 19(1):29–41, April 2017. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-017-9273-8>; <http://link.springer.com/article/10.1007/s10698-017-9273-8>.

Fortin:2017:RBC

- [425] Sebastian Fortin, Olimpia Lombardi, and Juan Camilo Martínez González. The relationship between chemistry and physics from the perspective of Bohmian mechanics. *Foundations of Chemistry*, 19(1):43–59, April 2017. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-017-9277-4>; <http://link.springer.com/article/10.1007/s10698-017-9277-4>.

Ruthenberg:2017:EMF

- [426] Klaus Ruthenberg and Juan Camilo Martínez González. Electronegativity and its multiple faces: persistence and measurement. *Foundations of Chemistry*, 19(1):61–75, April 2017. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-017-9278-3>; <http://link.springer.com/article/10.1007/s10698-017-9278-3>.

Villani:2017:CPS

- [427] Giovanni Villani. Chemical perspective in the study of living beings: a systemic complexity approach. *Foundations of Chemistry*, 19(1):77–91, April 2017. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-016-9258-z>; <http://link.springer.com/article/10.1007/s10698-016-9258-z>.

Black:2017:BRP

- [428] Roderick S. Black. Book review: Peter J. T. Morris: *The Matter Factory: A History of the Chemistry Laboratory*. *Foundations of*

Chemistry, 19(1):93–94, April 2017. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <http://link.springer.com/accesspage/article/10.1007/s10698-016-9255-2>; <http://link.springer.com/article/10.1007/s10698-016-9255-2>.

Scerri:2017:Eb

- [429] Eric Scerri. Editorial 56. *Foundations of Chemistry*, 19(2):95–96, July 2017. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/content/pdf/10.1007/s10698-017-9288-1.pdf>.

Ghibaudi:2017:CSM

- [430] Elena Ghibaudi and Luigi Cerruti. Chemical substance, material, product, goods, waste: a changing ontology. *Foundations of Chemistry*, 19(2):97–123, July 2017. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic).

Francisco:2017:CBB

- [431] Nuno Francisco, Carla Morais, João C. Paiva, and Paula Gameiro. A colourful bond between art and chemistry. *Foundations of Chemistry*, 19(2):125–138, July 2017. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic).

Vitas:2017:QRT

- [432] Marko Vitas and Andrej Dobovisek. On a quest of reverse translation. *Foundations of Chemistry*, 19(2):139–155, July 2017. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic).

Chamizo:2017:FCR

- [433] José A. Chamizo. The fifth chemical revolution: 1973–1999. *Foundations of Chemistry*, 19(2):157–179, July 2017. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic).

Scerri:2017:Ec

- [434] Eric Scerri. Editorial 57. *Foundations of Chemistry*, 19(3):181, October 2017. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/content/pdf/10.1007/s10698-017-9294-3.pdf>.

Banchetti-Robino:2017:GEb

- [435] Marina P. Banchetti-Robino. Guest editorial. *Foundations of Chemistry*, 19(3):183–184, October 2017. CODEN FOCHF. ISSN 1386-

4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/content/pdf/10.1007/s10698-017-9286-3.pdf>.

Cordoba:2017:HHN

- [436] Mariana Córdoba and Alfio Zambon. How to handle nanomaterials? The re-entry of individuals into the philosophy of chemistry. *Foundations of Chemistry*, 19(3):185–196, October 2017. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic).

Ochiai:2017:DMS

- [437] Hirofumi Ochiai. Does a molecule have structure? *Foundations of Chemistry*, 19(3):197–207, October 2017. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic).

Seifert:2017:AAU

- [438] Vanessa A. Seifert. An alternative approach to unifying chemistry with quantum mechanics. *Foundations of Chemistry*, 19(3):209–222, October 2017. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/content/pdf/10.1007/s10698-017-9285-4.pdf>.

Siderer:2017:UYT

- [439] Yona Siderer. Udagawa Youan’s (1798–1846) translation of light and heat reactions in his book *Kouso Seimika*. *Foundations of Chemistry*, 19(3):223–240, October 2017. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic).

Blumenthal:2017:DPW

- [440] Geoffrey Blumenthal and James Ladyman. The development of problems within the phlogiston theories, 1766–1791. *Foundations of Chemistry*, 19(3):241–280, October 2017. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/content/pdf/10.1007/s10698-017-9289-0.pdf>.

Wray:2017:NPS

- [441] K. Brad Wray. A new philosophy of science from the history of arcane natural science. *Foundations of Chemistry*, 19(3):281–285, October 2017. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic).

Scerri:2018:Ea

- [442] Eric Scerri. Editorial 58. *Foundations of Chemistry*, 20(1):1–2, April 2018. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (elec-

tronic). URL <https://link.springer.com/article/10.1007/s10698-018-9309-8>; <https://link.springer.com/content/pdf/10.1007/s10698-018-9309-8.pdf>.

Dolino:2018:CCS

- [443] Le Grande O. Dolino. Chemistry as a creative science. *Foundations of Chemistry*, 20(1):3–13, April 2018. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-017-9272-9>.

Johnson:2018:VL

- [444] David A. Johnson and Peter G. Nelson. Valencies of the lanthanides. *Foundations of Chemistry*, 20(1):15–27, April 2018. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-017-9291-6>; <https://link.springer.com/content/pdf/10.1007/s10698-017-9291-6.pdf>. See erratum [445] and correction [467].

Johnson:2018:EVL

- [445] David A. Johnson and Peter G. Nelson. Erratum to: Valencies of the lanthanides. *Foundations of Chemistry*, 20(1):29–30, April 2018. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-017-9296-1>; <https://link.springer.com/content/pdf/10.1007/s10698-017-9296-1.pdf>. See [444].

Iga:2018:BPS

- [446] Dumitru Petru Iga. Basic principles of the strategy concerning the elucidation of configuration of chiral centers of linear isomeric aldohexoses. *Foundations of Chemistry*, 20(1):31–41, April 2018. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-017-9292-5>.

Hefferlin:2018:AMP

- [447] Ray Hefferlin. An allegory on molecular periodicity. *Foundations of Chemistry*, 20(1):43–49, April 2018. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-017-9295-2>.

Zambon:2018:RPS

- [448] Alfio Zambon. A representation of the periodic system based on atomic-number triads. *Foundations of Chemistry*, 20(1):51–74, April 2018. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-017-9297-0>.

Seeman:2018:MBI

- [449] Jeffrey I. Seeman. Moving beyond insularity in the history, philosophy, and sociology of chemistry. *Foundations of Chemistry*, 20(1):75–86, April 2018. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-017-9290-7>; <https://link.springer.com/content/pdf/10.1007/s10698-017-9290-7.pdf>. See response [461].

Scerri:2018:Eb

- [450] Eric Scerri. Editorial 59. *Foundations of Chemistry*, 20(2):87–88, July 2018. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-9317-8>; <https://link.springer.com/content/pdf/10.1007/s10698-018-9317-8.pdf>.

Villani:2018:OPC

- [451] Giovanni Villani, Elena Ghibaudi, and Luigi Cerruti. The orbital: a pivotal concept in the relationship between chemistry and physics? A comment to the work by Fortin and coauthors. *Foundations of Chemistry*, 20(2):89–97, July 2018. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-017-9293-4>.

Hodder:2018:PTR

- [452] Peter Hodder. The periodic table: revelation by quest rather than by revolution. *Foundations of Chemistry*, 20(2):99–110, July 2018. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-017-9298-z>.

Stewart:2018:TSR

- [453] Philip J. Stewart. Tetrahedral and spherical representations of the periodic system. *Foundations of Chemistry*, 20(2):111–120, July 2018. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-017-9299-y>; <https://link.springer.com/content/pdf/10.1007/s10698-017-9299-y.pdf>.

Murphy:2018:EIR

- [454] Mark A. Murphy. Early industrial roots of green chemistry and the history of the BHC ibuprofen process invention and its quality connection. *Foundations of Chemistry*, 20(2):121–165, July

2018. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-017-9300-9>; <https://link.springer.com/content/pdf/10.1007/s10698-017-9300-9.pdf>.

Scerri:2018:Ec

- [455] E. R. Scerri. Editorial 60. *Foundations of Chemistry*, 20(3):167–168, October 2018. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-9322-y>; <https://link.springer.com/content/pdf/10.1007/s10698-018-9322-y.pdf>.

Blumenthal:2018:TCC

- [456] Geoffrey Blumenthal and James Ladyman. Theory comparison and choice in chemistry, 1766–1791. *Foundations of Chemistry*, 20(3):169–189, October 2018. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-017-9301-8>; <https://link.springer.com/content/pdf/10.1007/s10698-017-9301-8.pdf>.

Grochala:2018:PHN

- [457] Wojciech Grochala. On the position of helium and neon in the Periodic Table of Elements. *Foundations of Chemistry*, 20(3):191–207, October 2018. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-017-9302-7>; <https://link.springer.com/content/pdf/10.1007/s10698-017-9302-7.pdf>.

Wray:2018:ANR

- [458] K. Brad Wray. The atomic number revolution in chemistry: a Kuhnian analysis. *Foundations of Chemistry*, 20(3):209–217, October 2018. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-017-9303-6>.

Seeman:2018:MSI

- [459] Jeffrey I. Seeman. From “multiple simultaneous independent discoveries” to the theory of “multiple simultaneous independent errors”: a conduit in science. *Foundations of Chemistry*, 20(3):219–249, October 2018. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-9304-0>.

Petrusevski:2018:TPH

- [460] Vladimir M. Petrusevski and Julijana Cvetković. On the ‘true position’ of hydrogen in the Periodic Table. *Foundations of Chemistry*, 20(3):251–260, October 2018. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-9306-y>.

Fortin:2018:LUB

- [461] Sebastian Fortin, Olimpia Lombardi, and Juan Camilo Martínez González. Let us build better boats: an answer to Jeffrey Seeman’s “Moving beyond insularity in the history, philosophy, and sociology of chemistry”. *Foundations of Chemistry*, 20(3):261–264, October 2018. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-9307-x>; <https://link.springer.com/content/pdf/10.1007/s10698-018-9307-x.pdf>. See [449].

Malinen:2018:CCB

- [462] KelleyAnne Malinen and Chérif F. Matta. “Climate change” and the “butterfly effect” in an eighteenth century monograph. *Foundations of Chemistry*, 20(3):265–268, October 2018. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-9305-z>.

Scerri:2019:Ea

- [463] Eric Scerri. Editorial 61. *Foundations of Chemistry*, 21(1):1–2, April 2019. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-019-09335-6>; <https://link.springer.com/content/pdf/10.1007/s10698-019-09335-6.pdf>.

Stewart:2019:MPS

- [464] Philip J. Stewart. Mendeleev’s predictions: success and failure. *Foundations of Chemistry*, 21(1):3–9, April 2019. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-9312-0>; <https://link.springer.com/content/pdf/10.1007/s10698-018-9312-0.pdf>.

Chamizo:2019:ACR

- [465] José A. Chamizo. About continuity and rupture in the history of chemistry: the fourth chemical revolution (1945–1966). *Foundations of Chemistry*, 21(1):11–29, April 2019. CODEN FOCHFL. ISSN 1386-4238 (print),

1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-9308-9>.

Gonzalez:2019:WMS

- [466] Juan Camilo Martínez González, Sebastian Fortin, and Olimpia Lombardi. Why molecular structure cannot be strictly reduced to quantum mechanics. *Foundations of Chemistry*, 21(1):31–45, April 2019. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-9310-2>.

Johnson:2019:CVL

- [467] David A. Johnson and Peter G. Nelson. Correction to: Valencies of the lanthanides. *Foundations of Chemistry*, 21(1):47–48, April 2019. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-9311-1>; <https://link.springer.com/content/pdf/10.1007/s10698-018-9311-1.pdf>. See [444].

Fortin:2019:GEI

- [468] Sebastian Fortin, Camilo Martinez Gonzalez, Alfio Zambon, and Waldmir Araujo Neto. Guest editorial: ISPC 2015 special issue. *Foundations of Chemistry*, 21(1):49–50, April 2019. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-019-09336-5>; <https://link.springer.com/content/pdf/10.1007/s10698-019-09336-5.pdf>.

Banchetti-Robino:2019:FMB

- [469] Marina Paola Banchetti-Robino. The function of microstructure in Boyle’s chemical philosophy: ‘chymical atoms’ and structural explanation. *Foundations of Chemistry*, 21(1):51–59, April 2019. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-09326-z>.

Scerri:2019:FIC

- [470] Eric R. Scerri. Five ideas in chemical education that must die. *Foundations of Chemistry*, 21(1):61–69, April 2019. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-09327-y>.

Accorinti:2019:IMC

- [471] Hernán Lucas Accorinti. Incompatible models in chemistry: the case of electronegativity. *Foundations of Chemistry*, 21(1):71–81, April 2019.

CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-09328-x>.

Polzella:2019:RES

- [472] María Silvia Polzella and Penélope Lodeyro. Re-evaluating semi-empirical computer simulations in quantum chemistry. *Foundations of Chemistry*, 21(1):83–95, April 2019. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-09329-w>.

Gonzalez:2019:POI

- [473] Juan Camilo Martínez González. The problem of optical isomerism and the interpretation of quantum mechanics. *Foundations of Chemistry*, 21(1):97–107, April 2019. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-09330-3>.

Martins:2019:EMM

- [474] Roberto de Andrade Martins. Émile Meyerson and mass conservation in chemical reactions: a priori expectations versus experimental tests. *Foundations of Chemistry*, 21(1):109–124, April 2019. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-09331-2>.

Arriaga:2019:NCP

- [475] Jesus Alberto Jaimes Arriaga, Sebastian Fortin, and Olimpia Lombardi. A new chapter in the problem of the reduction of chemistry to physics: the Quantum Theory of Atoms in Molecules. *Foundations of Chemistry*, 21(1):125–136, April 2019. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-09332-1>.

Scerri:2019:Eb

- [476] Eric Scerri. Editorial 62. *Foundations of Chemistry*, 21(2):137–138, July 2019. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-019-09339-2>; <https://link.springer.com/content/pdf/10.1007/s10698-019-09339-2.pdf>.

Wray:2019:WMM

- [477] K. Brad Wray. What to make of Mendeleev’s predictions? *Foundations of Chemistry*, 21(2):139–143, July 2019. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-9313-z>.

Stewart:2019:GIR

- [478] Philip J. Stewart. Getting it right is not equivalent to getting it wrong. *Foundations of Chemistry*, 21(2):145–146, July 2019. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-9316-9>; <https://link.springer.com/content/pdf/10.1007/s10698-018-9316-9.pdf>.

Blumenthal:2019:PVC

- [479] Geoffrey Blumenthal. Priestley's views on the composition of water and related airs. *Foundations of Chemistry*, 21(2):147–178, July 2019. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-9314-y>; <https://link.springer.com/content/pdf/10.1007/s10698-018-9314-y.pdf>.

Nelson:2019:WCM

- [480] Peter G. Nelson. What is chemistry that I may teach it? *Foundations of Chemistry*, 21(2):179–191, July 2019. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-9315-x>; <https://link.springer.com/content/pdf/10.1007/s10698-018-9315-x.pdf>.

Liu:2019:RCE

- [481] Runzhan Liu, Guoyong Mao, and Ning Zhang. Research of chemical elements and chemical bonds from the view of complex network. *Foundations of Chemistry*, 21(2):193–206, July 2019. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-9318-7>.

Suarez:2019:NTN

- [482] Rosana del P. Suárez. The network theory: a new language for speaking about chemical elements relations through stoichiometric binary compounds. *Foundations of Chemistry*, 21(2):207–220, July 2019. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-9319-6>.

Quilez:2019:HEA

- [483] Juan Quílez. A historical/epistemological account of the foundation of the key ideas supporting chemical equilibrium theory. *Foundations of Chemistry*, 21(2):221–252, July 2019. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-9320-0>.

Scerri:2019:E

- [484] Eric Scerri. Editorial 63. *Foundations of Chemistry*, 21(3):253–254, October 2019. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-019-09341-8>; <https://link.springer.com/content/pdf/10.1007/s10698-019-09341-8.pdf>.

Imyanitov:2019:DPT

- [485] Naum S. Imyanitov. Does the period table appear doubled? Two variants of division of elements into two subsets. Internal and secondary periodicity. *Foundations of Chemistry*, 21(3):255–284, October 2019. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-9321-z>.

Gilead:2019:FLP

- [486] Amihud Gilead. Further light on the philosophical significance of Mackay’s theoretical discovery of crystalline pure possibilities. *Foundations of Chemistry*, 21(3):285–296, October 2019. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-9323-x>.

Pisano:2019:TFP

- [487] Raffaele Pisano, Abdelkader Anakkar, Emilio Marco Pellegrino, and Maxime Nagels. Thermodynamic foundations of physical chemistry: reversible processes and thermal equilibrium into the history. *Foundations of Chemistry*, 21(3):297–323, October 2019. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-018-09324-1>.

Nelson:2019:SMI

- [488] Peter G. Nelson. Statistical mechanical interpretation of temperature. *Foundations of Chemistry*, 21(3):325–331, October 2019. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-019-09337-4>; <https://link.springer.com/content/pdf/10.1007/s10698-019-09337-4.pdf>

Santana:2019:MMW

- [489] Carlos Santana. Mineral misbehavior: why mineralogists don’t deal in natural kinds. *Foundations of Chemistry*, 21(3):333–343, October 2019. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-019-09338-3>.

StGermain:2019:GVC

- [490] Elijah St. Germain. Giovanni Villani: Chemistry: A systemic complexity science. *Foundations of Chemistry*, 21(3):345–348, October 2019. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-019-09340-9>.

Scerri:2020:Ea

- [491] Eric Scerri. Editorial 64. *Foundations of Chemistry*, 22(1):1–2, April 2020. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-020-09360-w>; <https://link.springer.com/content/pdf/10.1007/s10698-020-09360-w.pdf>.

Stewart:2020:THT

- [492] Philip J. Stewart. From telluric helix to telluric remix. *Foundations of Chemistry*, 22(1):3–14, April 2020. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-019-09334-7>; <https://link.springer.com/content/pdf/10.1007/s10698-019-09334-7.pdf>.

Seifert:2020:RID

- [493] Vanessa A. Seifert. The role of idealisations in describing an isolated molecule. *Foundations of Chemistry*, 22(1):15–29, April 2020. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-019-09342-7>; <https://link.springer.com/content/pdf/10.1007/s10698-019-09342-7.pdf>.

Friend:2020:BFL

- [494] Michèle Friend. The beginnings of a formal language for conceptual analysis of processes in macro-chemistry. *Foundations of Chemistry*, 22(1):31–42, April 2020. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-019-09343-6>.

Price:2020:MTC

- [495] Justin Price. Model transfer and conceptual progress: tales from chemistry and biology. *Foundations of Chemistry*, 22(1):43–57, April 2020. CODEN FOCHFL. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-019-09344-5>.

Buyse:2020:BSG

- [496] Filip A. A. Buyse. Boyle, Spinoza and Glauber: on the philosophical redintegration of saltpeter —a reply to Antonio Clericuzio. *Foundations of Chemistry*, 22(1):59–76, April 2020. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-019-09345-4>.

Ochiai:2020:OSA

- [497] Hirofumi Ochiai. Overcoming skepticism about molecular structure by developing the concept of affordance. *Foundations of Chemistry*, 22(1):77–86, April 2020. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-019-09349-0>.

Eaton:2020:WSW

- [498] Gareth R. Eaton. Whom should we credit for the discovery of isotopes? *Foundations of Chemistry*, 22(1):87–98, April 2020. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-019-09347-2>.

Dias:2020:TCB

- [499] Jerry Ray Dias. Teaching of chemistry before and after the periodic table. *Foundations of Chemistry*, 22(1):99–106, April 2020. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-020-09354-8>.

Matta:2020:TSE

- [500] Chérif F. Matta, Olimpia Lombardi, and Jesús Jaimes Arriaga. Two-step emergence: the quantum theory of atoms in molecules as a bridge between quantum mechanics and molecular chemistry. *Foundations of Chemistry*, 22(1):107–129, April 2020. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-020-09352-w>.

Levere:2020:PGI

- [501] Trevor H. Levere. Pere Grapí: Inspiring air: a history of air-related science. *Foundations of Chemistry*, 22(1):131–133, April 2020. CODEN FOCHF. ISSN 1386-4238 (print), 1572-8463 (electronic). URL <https://link.springer.com/article/10.1007/s10698-019-09351-6>.

Shakhashiri:1983:CDH

- [502] Bassam Z. Shakhashiri. *Chemical demonstrations: a handbook for teachers of chemistry*. University of Wisconsin Press, Madison, WI,

USA, 1983–2011. ISBN 0-299-08890-1 (vol. 1), 0-299-10130-4 (vol. 2), 0-299-11950-5 (vol. 3), 0-299-12860-1 (vol. 4), 0-299-22650-6 (vol. 5). xxiv + 343 (vol. 1: 1983), xxxvi + 311 (vol. 2: 1983), xx + 401 (vol. 3: 1989) xxvii + 290 (vol. 4: 1992), xxxiv + 323 (vol. 5: 2011) pp. LCCN QD43 .S5 1983. US\$25.00. URL <http://www.loc.gov/catdir/enhancements/fy0608/81070016-d.html>; <http://www.loc.gov/catdir/enhancements/fy0608/81070016-t.html>; <http://www.loc.gov/catdir/enhancements/fy0609/81070016-b.html>.

Grosberg:1997:GMH

- [503] A. Yu. Grosberg and A. R. Khokhlov. *Giant molecules: here, and there, and everywhere*. Academic Press, New York, USA, 1997. ISBN 0-12-304130-9. xv + 244 pp. LCCN QD381 .G755 1997. URL <http://www.loc.gov/catdir/description/els032/96027593.html>; <http://www.loc.gov/catdir/toc/els032/96027593.html>.

Pullman:1998:AHH

- [504] Bernard Pullman. *The atom in the history of human thought*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 1998. ISBN 0-19-511447-7 (hardcover). x + 403 pp. LCCN QC171.2 .P8513 1998. URL <http://www.loc.gov/catdir/enhancements/fy0635/97036040-d.html>; <http://www.loc.gov/catdir/enhancements/fy0723/97036040-b.html>. Translation from French by Axel Reisinger.

Albert:2000:GLN

- [505] Mark Albert. *Galen's lectures: a novel about chemistry*. Xlibris, ????, 2000. ISBN 0-7388-4196-X. 493 pp. LCCN PS3551.L259 G35 2000.

Djerassi:2000:IMS

- [506] Carl Djerassi. *An immaculate misconception: sex in an age of mechanical reproduction*. Imperial College Press, London, UK, 2000. ISBN 1-86094-248-2 (paperback). 1-84816-010-0 (e-book). xviii + 134 pp. LCCN PS3554.J47 I46 2000.

Laszlo:2000:MC

- [507] Pierre Laszlo. *Miroir de la chimie*. Science ouverte. Seuil, Paris, France, 2000. ISBN 2-02-035273-7. 328 pp. LCCN QD39 .L37 2000.

vanBrakel:2000:PCB

- [508] J. (Jaap) van Brakel. *Philosophy of chemistry: between the manifest and the scientific image*, volume 15 of *Louvain philosophical studies*. Leuven University Press, Leuven, Belgium, 2000. ISBN 90-5867-063-5. xiv + 246 pp. LCCN QD6 .B75 2000.

Christie:2001:OLP

- [509] Maureen Christie. *The Ozone Layer: A Philosophy of Science Perspective*. Cambridge University Press, Cambridge, UK, 2001. ISBN 0-521-65072-0 (hardcover), 0-521-65908-6 (paperback). xii + 215 pp. LCCN QC881.2.O9 C48 2001. URL <http://www.loc.gov/catdir/description/cam021/00036295.html>; <http://www.loc.gov/catdir/samples/cam031/00036295.html>; <http://www.loc.gov/catdir/toc/cam021/00036295.html>.

Gillespie:2001:CBM

- [510] Ronald J. (Ronald James) Gillespie and Paul L. A. Popelier. *Chemical bonding and molecular geometry: from Lewis to electron densities*. Topics in inorganic chemistry. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 2001. ISBN 0-19-510495-1, 0-19-510496-X (paperback). xiii + 268 pp. LCCN QD461 .G537 2001. URL <http://www.loc.gov/catdir/enhancements/fy0610/00025404-d.html>; <http://www.loc.gov/catdir/enhancements/fy0610/00025404-t.html>.

Basolo:2002:CIC

- [511] Fred Basolo. *From Coello to inorganic chemistry: a lifetime of reactions*. Profiles in inorganic chemistry. Kluwer Academic/Plenum Publishers, New York, NY, USA, 2002. ISBN 0-306-46774-7. xxii + 245 pp. LCCN QD22.B258 A3 2002. URL <http://www.loc.gov/catdir/enhancements/fy0813/2002022220-t.html>; <http://www.loc.gov/catdir/enhancements/fy0820/2002022220-d.html>.

Cobb:2002:MMM

- [512] Cathy Cobb. *Magick, mayhem, and mavericks: the spirited history of physical chemistry*. Prometheus Books, Amherst, NY, USA, 2002. ISBN 1-57392-976-X. 420 pp. LCCN QD452 .C63 2002.

Habashi:2002:AAB

- [513] Fathi Habashi. *From alchemy to atomic bombs: history of chemistry, metallurgy, and civilization*. Métallurgie Extractive Québec, Sainte Foy, QC, Canada, 2002. ISBN 2-922686-00-0. x + 357 pp. LCCN QD11 .H23 2002.

Hentschel:2002:MST

- [514] Klaus Hentschel. *Mapping the spectrum: techniques of visual representation in research and teaching*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 2002. ISBN 0-19-850953-7 (hardcover). xii + 362 pp. LCCN QD95 .H47 2002. URL http://www.e-streams.com/es0511/es0511_2165.html; <http://www.loc.gov/catdir/enhancements/>

fy0613/2002072578-d.html; <http://www.loc.gov/catdir/toc/fy032/2002072578.html>.

Seligardi:2002:LIC

- [515] Raffaella Seligardi. *Lavoisier in Italia: la comunità scientifica italiana e la rivoluzione chimica*, volume 46 of *Biblioteca di storia della scienza*. L. S. Olschki, Firenze, Italia, 2002. ISBN 88-222-5150-4. ISSN 0394-5065. 410 pp. LCCN QD18.I8 S45 2002.

Pohanish:2003:WGC

- [516] Richard P. Pohanish and Stanley A. Greene. *Wiley guide to chemical incompatibilities*. John Wiley, New York, NY, USA, second edition, 2003. ISBN 0-471-23859-7. xvi + 1278 pp. LCCN T55.3.H3 P647 2003. URL <http://www.loc.gov/catdir/bios/wiley044/2002032959.html>; <http://www.loc.gov/catdir/description/wiley037/2002032959.html>; <http://www.loc.gov/catdir/toc/wiley031/2002032959.html>.

Gordin:2004:WOT

- [517] Michael D. Gordin. *A well-ordered thing: Dmitrii Mendeleev and the shadow of the periodic table*. Basic Books, New York, NY, USA, 2004. ISBN 0-465-02775-X. xx + 364 pp. LCCN QD22.M43 G67 2004. URL <http://www.loc.gov/catdir/enhancements/fy0832/2003025533-b.html>; <http://www.loc.gov/catdir/enhancements/fy0832/2003025533-d.html>; <http://www.loc.gov/catdir/toc/ecip0411/2003025533.html>.

Scerri:2007:PTS

- [518] Eric R. Scerri. *The Periodic Table: Its Story and Its Significance*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 2007. ISBN 0-19-530573-6. xxii + 346 pp. LCCN QD467 .S345 2007. URL <http://www.loc.gov/catdir/enhancements/fy0635/2005037784-d.html>; <http://www.loc.gov/catdir/enhancements/fy0722/2005037784-b.html>; <http://www.loc.gov/catdir/toc/ecip065/2005037784.html>.

Bensaude-Vincent:2008:CIS

- [519] Bernadette Bensaude-Vincent and Jonathan Simon. *Chemistry: the impure science*. Imperial College Press, London, UK, 2008. ISBN 1-84816-225-1 (hardcover). xii + 268 pp. LCCN QD31.3 .B455 2008.

Brock:2008:WCC

- [520] W. H. (William Hodson) Brock. *William Crookes (1832–1919) and the commercialization of science*. Science, technology, and culture. Ashgate,

Aldershot, England, 2008. ISBN 0-7546-6322-1. ISSN 1700-1945. xxvii + 556 pp. LCCN Q143.C7 B76 2008.

Chalmers:2009:SAP

- [521] A. F. (Alan Francis) Chalmers. *The Scientist's Atom and the Philosopher's Stone: How Science Succeeded and Philosophy Failed to Gain Knowledge of Atoms*, volume 279 of *Boston Studies in the Philosophy of Science*. Springer-Verlag, Berlin, Germany / Heidelberg, Germany / London, UK / etc., 2009. ISBN 90-481-2361-5, 90-481-2362-3. ISSN 0068-0346. xii + 287 pp. LCCN QD461 .C375 2009. URL <https://link.springer.com/book/10.1007/978-90-481-2362-9>.

He:2009:TDX

- [522] Bob B. He. *Two-dimensional X-ray diffraction*. John Wiley, New York, NY, USA, 2009. ISBN 0-470-22722-2. xiv + 426 pp. LCCN QC482.D5 H4 2009. URL <http://www.loc.gov/catdir/enhancements/fy1012/2009005619-b.html>; <http://www.loc.gov/catdir/enhancements/fy1012/2009005619-d.html>; <http://www.loc.gov/catdir/enhancements/fy1012/2009005619-t.html>.

Klabunde:2009:NMC

- [523] Kenneth J. Klabunde and Ryan Richards. *Nanoscale materials in chemistry*. John Wiley, New York, NY, USA, second edition, 2009. ISBN 0-470-22270-0 (hardcover). xiii + 777 + 12 pp. LCCN TA418.9.N35 N345 2009.

Olah:2009:BOG

- [524] George A. (George Andrew) Olah, Alain Goeppert, and G. K. Surya Prakash. *Beyond oil and gas: the methanol economy*. Wiley-VCH, Weinheim, German, second updated and enlarged edition, 2009. ISBN 3-527-32422-4. xvi + 334 pp. LCCN HD9502.5.M472 O43 2009. URL <http://www.loc.gov/catdir/enhancements/fy1106/2010485132-b.html>; <http://www.loc.gov/catdir/enhancements/fy1106/2010485132-d.html>; <http://www.loc.gov/catdir/enhancements/fy1106/2010485132-t.html>.

Pohanish:2009:WGC

- [525] Richard P. Pohanish and Stanley A. Greene. *Wiley guide to chemical incompatibilities*. John Wiley, New York, NY, USA, third edition, 2009. ISBN 0-470-38763-7. xviii + 1110 pp. LCCN T55.3.H3 P647 2009. URL <http://www.loc.gov/catdir/enhancements/fy1011/2009009766-b.html>; <http://www.loc.gov/catdir/enhancements/fy1011/2009009766-d.html>; <http://www.loc.gov/catdir/enhancements/fy1011/2009009766-t.html>.

Roesky:2009:EGS

- [526] Herbert W. Roesky, Dietmar K. Kennepohl, and Jean-Marie Lehn, editors. *Experiments in green and sustainable chemistry*. Wiley-VCH, Weinheim, Germany, 2009. ISBN 3-527-32546-8 (hardcover). xxiv + 283 pp. LCCN TP155.2.E58 E96 2009.

Fisher:2010:MAA

- [527] David E. Fisher. *Much ado about (practically) nothing: a history of the noble gases*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 2010. ISBN 0-19-539396-1 (hardcover). x + 264 pp. LCCN QD162 .F57 2010.

Kean:2010:DSO

- [528] Sam Kean. *The disappearing spoon: and other true tales of madness, love, and the history of the world from the periodic table of the elements*. Little, Brown and Company, Boston, Toronto, London, 2010. ISBN 0-316-05164-0. vi + 391 pp. LCCN QD466 .K37 2010.

Grosberg:2011:GMH

- [529] A. Yu. Grosberg and A. R. Khokhlov. *Giant molecules: here, there, and everywhere*. World Scientific Publishing Co., Singapore; Philadelphia, PA, USA; River Edge, NJ, USA, second edition, 2011. ISBN 981-283-922-4 (hardcover). xxiv + 322 pp. LCCN QD381 .G755 2011. Foreword by Pierre-Gilles de Gennes.

WeidlerKubanek:2011:NLT

- [530] Anne-Marie Weidler Kubanek. *Nothing less than an adventure: Ellen Gleditsch and her life in science*. Createspace Online, ????, 2011. ISBN 1-4528-4213-2. 185 pp. LCCN ????

Llored:2013:PCP

- [531] Jean-Pierre Llored, editor. *The philosophy of chemistry: practices, methodologies, and concepts*. Cambridge Scholars Publishing, Newcastle upon Tyne, UK, 2013. ISBN 1-4438-4605-8 (hardcover). xix + 764 pp. LCCN QD6 .P49 2013.

Scerri:2013:SEMa

- [532] Eric R. Scerri. *30-second elements: the 50 most significant elements, each explained in half a minute*. Metro Books, New York, NY, USA, 2013. ISBN 1-4351-4521-6. 160 pp. LCCN QD466 .S34 2013.

Scerri:2013:SEMb

- [533] Eric R. Scerri. *30-second elements: the 50 most significant elements, each explained in half a minute*. Icon, London, UK, 2013. ISBN 1-84831-594-5. 160 pp. LCCN ????. With Hugh Aldersey-Williams.

Scerri:2013:SEMc

- [534] Eric R. Scerri and Danian (Ying Yu) Li. *30-second elements. Miao gao dong hua xue yuan su: zhou qi biao mei ni xiang de na me nan*, volume 1. Qi lin wen hua chu ban, Tai bei shi, Taiwan, 2013. ISBN 986-5893-54-1. ????. pp. LCCN QD466.

Scerri:2013:TE

- [535] Eric R. Scerri. *A tale of 7 elements*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 2013. ISBN 0-19-539131-4 (hardcover), 0-19-987503-0 (e-book). xxxiii + 270 pp. LCCN QD467 .S3475 2013. URL <http://catalogue.bnf.fr/ark:/12148/cb436625450>.

Barton:1982:RBW

- [536] Sir Derek Barton, FRS, editor. *R. B. Woodward remembered: a collection of papers in honour of Robert Burns Woodward, 1917–1979*. Pergamon Press, Oxford, UK, 1982. ISBN 0-08-029238-0. xx + 522 pp. LCCN QD255 .R23 1982.

Cornish-Bowden:1997:NBO

- [537] Athel Cornish-Bowden, editor. *New beer in an old bottle: Eduard Buchner and the growth of biochemical knowledge*. Col·lecció oberta. Universitat de València, València, Spain, 1997. ISBN 84-370-3328-4. 252 pp. LCCN ????. URL <http://www.gbv.de/dms/bs/toc/318369354.pdf>.

Knight:1998:MCS

- [538] David M. Knight and Helge Kragh, editors. *The making of the chemist: the social history of chemistry in Europe, 1789–1914*. Cambridge University Press, Cambridge, UK, 1998. ISBN 0-521-58351-9 (hardcover). xxi + 353 pp. LCCN QD39.7 .M34 1998. URL <http://www.loc.gov/catdir/description/cam028/97043009.html>; <http://www.loc.gov/catdir/toc/cam021/97043009.html>.

Bhushan:2000:MMN

- [539] Nalini Bhushan and Stuart M. Rosenfeld, editors. *Of minds and molecules: new philosophical perspectives on chemistry*. Oxford University Press, Walton Street, Oxford OX2 6DP, UK, 2000. ISBN 0-19-512834-6. xvi

+ 299 pp. LCCN QD6 .O34 2000. URL <http://www.loc.gov/catdir/enhancements/fy0604/99040329-d.html>.

Lundgren:2000:CCT

- [540] Anders Lundgren and Bernadette Bensaude-Vincent, editors. *Communicating chemistry: textbooks and their audiences, 1789–1939*, volume 3 of *European studies in science history and the arts*. Science History Publications/USA, Canton, MA, 2000. ISBN 0-88135-274-8. vii + 465 pp. LCCN QD8.5 .C66 2000. URL <http://www.loc.gov/catdir/toc/fy032/99052211.html>.

Benfey:2001:RBW

- [541] O. Theodor (Otto Theodor) Benfey and Peter John Turnbull Morris, editors. *Robert Burns Woodward: architect and artist in the world of molecules*. History of modern chemical sciences. Chemical Heritage Foundation, Philadelphia, PA, USA, 2001. ISBN 0-941901-25-4. ISSN 1069-2452. xxvii + 470 pp. LCCN QD22.W67 R63 2001. URL <http://www.loc.gov/catdir/enhancements/fy0630/00050876-d.html>.

Klabunde:2001:NMC

- [542] Kenneth J. Klabunde, editor. *Nanoscale materials in chemistry*. Wiley-Interscience, New York, NY, USA, 2001. ISBN 0-471-38395-3. xi + 292 pp. LCCN TA418.9.N35 N345 2001. URL <http://www.loc.gov/catdir/bios/wiley043/2001022371.html>; <http://www.loc.gov/catdir/description/wiley036/2001022371.html>; <http://www.loc.gov/catdir/toc/onix07/2001022371.html>.

Ruthenberg:2008:SNC

- [543] Klaus Ruthenberg and J. van (Jaap) Brakel, editors. *Stuff: the nature of chemical substances*. Königshausen and Neumann, Würzburg, Germany, 2008. ISBN 3-8260-3704-9 (paperback). LCCN QD39 .S78 2008.

Scerri:2008:CPP

- [544] Eric R. Scerri, editor. *Collected papers on philosophy of chemistry*. Imperial College Press, London, UK, 2008. ISBN 1-84816-137-9. x + 235 pp. LCCN QD6 .S34 2008. URL <http://www.loc.gov/catdir/toc/fy0903/2008278137.html>.

Scerri:2009:SPP

- [545] Eric R. Scerri, editor. *Selected papers on the periodic table*. Imperial College Press, London, UK, 2009. ISBN 1-84816-425-4. ix + 143 pp. LCCN QD467 .S347 2009.

Gavroglou:2012:NPN

- [546] Kostas Gavroglou and Ana Simões. *Neither physics nor chemistry: a history of quantum chemistry*. Transformations: studies in the history of science and technology. MIT Press, Cambridge, MA, USA, 2012. ISBN 0-262-01618-4 (hardcover). xiv + 351 pp. LCCN QD462 .G38 2012.

Lagerkvist:2012:PTM

- [547] Ulf Lagerkvist, editor. *The periodic table and a missed Nobel Prize*. World Scientific Publishing Co., Singapore; Philadelphia, PA, USA; River Edge, NJ, USA, 2012. ISBN 981-4295-95-7 (paperback), 981-4295-96-5 (e-book). xii + 122 pp. LCCN AS911.N9 .L34 2012; QD11 .L34 2012; QD467 .L34 2012. URL <http://www.worldscientific.com/worldscibooks/10.1142/7658>. Edited by Erling Norrby.

Scerri:2014:SEM

- [548] Eric R. Scerri, editor. *30-second elements: the 50 most significant elements, each explained in half a minute*. Pier 9, Crows Nest, NSW, Australia, 2014. ISBN 1-74336-084-3. 160 pp. LCCN ????