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Johann Rudolph Glauber
"Spiritus von Stein-Kohlen"
(http://reader.digitale-sammlungen.de/de/fs1/object/display/bsb10226683_00187.html)
- [008] Furni Novi Philosophici (Band 2 / Ander Theil) Amsterdam 1650
(Furni Novi Philosophici Oder Beschreibung einer New-erfundenen Distillir-Kunst)
Johann Rudolph Glauber
S. 71 in der Auflage von 1650, Amsterdam; S. 85 in der Auflage von 1661, Amsterdam (cap. XLIV)
(deutschsprachige Ausgaben)
Kapitel "Von den Stein-Kohlen"
"...so gehet nicht allein ein scharfer Spiritus, sondern auch ein hitziges und blut-rothes Oleum über welches alle feuchte Ulcera gewaltig trucknet und heilet..."
(unterschiedliche Schreibweisen in den Auflagen)
- [009] (Glaubers "liebliches Oleum")
Ich habe hierfür keine Originalquelle finden können, hatte allerdings auch keinen unbeschränkten Zugang zu möglicherweise zielführenden Werken.
Nutzt man eine populäre Suchmaschine, so findet man in vielen Dokumenten Hinweise auf Glaubers "subtiles und liebliches Oleum", auch in (de.)Wikipedia (Stand März 2015) ist davon zu lesen. Ich habe bislang von diesem Begriff, so passend er Benzol auch beschreiben mag, nichts gefunden; zumindest nicht im Zusammenhang mit seiner Steinkohledestillation. Möglicherweise gibt es aber noch Dokumente Glaubers oder seiner Zeitzeugen, die ich nicht gesichtet habe, bzw. möglicherweise eine andere Auflage, oder ich habe es schlichtweg nicht aufspüren können. Dennoch, seine Ausführungen in den "philosophischen Öfen" und dem Concentratus lassen auf eine thermische Abtrennung mindestens benzolhaltiger Kohlenwasserstoffe schließen. Auch bei einer Durchsicht der Schrift von Erich Pietsch [010] fand ich lediglich Hinweise auf letzteres.
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http://daten.digitale-sammlungen.de/bsb00028550/image_1
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 $(\text{Br}_2 + \text{H}_2\text{O} \rightarrow \text{HBr} + \text{HOBr})$
 $\text{Br}_2 + \text{NaHSO}_3 + \text{H}_2\text{O} \rightarrow 2 \text{Br}^- + 2 \text{H}^+ + \text{HSO}_4^- + \text{Na}^+$
 $\text{Br}_2 + \text{Na}_2\text{S}_2\text{O}_3 + \text{H}_2\text{O} \rightarrow 2 \text{Br}^- + 2 \text{Na}^+ + 2 \text{H}^+ + \text{SO}_4^{2-} + \text{S} \downarrow$
 $(\text{S} + 3 \text{Br}_2 + 4 \text{H}_2\text{O} \rightarrow 6 \text{HBr} + \text{H}_2\text{SO}_4)$
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 "¹³C-ENDOR-Untersuchungeines organischen Tetraradikals im Quintetzustand; Synthese eines vierfach ¹³C-markierten Tetrakisgalvinols"
 DOI: 10.1002/ange.19860981208
ACIE 1986, #25-12, p. 1097 - 1098
 Michael Grimm, Burkhard Kirste und Harry Kurreck
 "¹³C-ENDOR Investigation of an Organic Tetraradical in the Quintet State; Synthesis of a Fourfold ¹³C-Labeled Tetrakisgalvinol"
 DOI: 10.1002/anie.198610971
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 DOI: 10.1016/0584-8539(72)80247-2
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 "N,N-dipyridyl 3,4,9,10-tetraformyl diimine derivative and its synthesis method"
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 DOI: 10.1016/j.bmc.2006.09.029
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 "Efficient Reduction Of Aromatic Bis-Imides To Their Amine Derivatives"
 DOI: 10.1080/00397918908052579
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 Masaki Takahashi, Yousuke Suzuki, Yasunori Ichihashi, Mitsuji Yamashita and Hideki Kawai
 "1,3,8,10-Tetrahydro-2,9-diazadibenzo[cd,lm]perylens: Synthesis of reduced perylene bisimide analogues"
 DOI: 10.1016/j.tetlet.2006.11.100
- [438] *Chem. Comm.* 2005, p. 2172 - 2174
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 "Selective Ir-catalysed borylation of polycyclic aromatic hydrocarbons: structures of naphthalene-2,6-bis(boronate), pyrene-2,7-bis(boronate) and perylene-2,5,8,11-tetra(boronate) esters"
 DOI: 10.1039/B501778E

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Koichi Kodama, Akinori Kobayashi and Takuji Hirose
"Synthesis and spectral properties of ruthenium(II) complexes based on 2,2'-bipyridines modified by a perylene chromophore"
DOI: 10.1016/j.tetlet.2013.07.150
- [440] Chem. Comm. 2008, p. 6594 - 6596 (+ Suppl.)
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DOI: 10.1039/b814913e
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DOI: 10.1016/S0020-1693(00)87930-X
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Ernst Späth
"Über die Einwirkung von Essigssäureanhydrid auf Nitrate"
DOI: 10.1007/BF01519254
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Mr. V. Auger and Ms. I. Robin (présentiert / verlesen durch Mr. G. Urbain)
Chimie Minérale: "Sur un acétate basique de zinc analogue à l'acétate de glucinium"
<http://gallica.bnf.fr/ark:/12148/bpt6k3131z/f1546.image> (bislang nicht als OCR verfügbar)
allg. Übersicht Compt. Rend. <http://gallica.bnf.fr/ark:/12148/cb343481087/date>
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"Über Zink-oxy-acetat"
DOI: 10.1002/zaac.1959301050
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Elisenda Reixach, Robert M. Haak, Stefan Wershofen and Anton Vidal-Ferran
"Alkoxy-carbonylation of Industrially Relevant Anilines Using Zn₄O(O₂CCH₃)₆ as Catalyst"
DOI: 10.1021/ie301315k
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"Preparation and properties of tetrazinc μ_4 -oxohexa- μ -carboxylates (basic zinc carboxylates)"
DOI: 10.1139/v83-217
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L. R. Ocone and B. P. Block
(checked by James P. Collman and David A. Buckingham)
"Anhydrous Chromium(II) Acetate, Chromium(II) Acetate 1-Hydrate, and Bis(2,4-Pentanedionato)chromium(II)"
DOI: 10.1002/9780470132395.ch33
- [448] Georg Brauer (Editor) und Mitautoren (Cr/Mo/W: S. Herzog, K. Gustav, J. Strähle)
"Handbuch der präparativen anorganischen Chemie", Band 3
Chrom(II)-acetat; [Cr₂(OAc)₄(H₂O)₂] S. 1511 - 1512
Molybdän(II)-chlorid; [Mo₆Cl₈]Cl₄ inkl. vorbereitender Schritte (MoCl₃) S. 1530 - 1533
CrCl₂ aus Cr⁰_{met} und HCl S. 1478 - 1480
Cr²⁺ anderweitig bzw. auch per Jones-Reduktor S. 1509 - 1511
Verlag Ferdinand Enke, Stuttgart 1981
ISBN 3-432-87823-0, 3. Auflage
- [449] a) Inorg. Synth. 1950, #3, p. 148 - 150
M. R. Hatfield, Helen Matheson and Jacob Kleinberg
"Chromium(II) Acetate (Chromous Acetate)"
DOI: 10.1002/9780470132340.ch39

b) Inorg. Synth. 1950, #3, p. 150 - 153
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"Anhydrous Chromium(II) Chloride (Chromous Chloride)"
DOI: 10.1002/9780470132340.ch40

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"A simple homogeneous precipitation preparation of chromium(II) acetate"
DOI: 10.1021/ed062p444

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Frank E. Mabbs, Eric J. L. McInnes, Mark Murrie, Simon Parsons, Graham M. Smith, Chick C. Wilson and Richard E. P. Winpenny
"Characterisation of a dodecanuclear chromium(III) cage with an S = 6 ground state"
DOI: 10.1039/A900023B

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April C. Royer, Robin D. Rogers, David L. Arrington, Shane C. Street and John B. Vincent
"Spectroscopic studies of the dodecanuclear chromium complex $\text{Cr}_{12}\text{O}_9(\text{OH})_3(\text{pivalate})_{15}$: confirmation of the presence of twelve Cr(III) centers and the crystal structure of $\text{Cr}_{12}\text{O}_9(\text{OH})_3(\text{pivalate})_{15} \cdot 2 \text{PrOH} \cdot 9 \text{H}_2\text{O}$ "
DOI: 10.1016/S0277-5387(01)00955-X (10.5517/cc5jghm)

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Guillem Aromí, Andrei S. Batsanov, Paul Christian, Madeleine Helliwell, Andrew Parkin, Simon Parsons, Andrew A. Smith, Grigore A. Timco and Richard E. P. Winpenny
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DOI: 10.1002/chem.200304993

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L. Paul Liechti and Bernhard Kempe
"Ueber die Chloride des Molybdäns"
DOI: 10.1002/jlac.18731690303

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Kurt Lindner, Emma Haller and Herbert Helwig
"Über die Chloride des zweiwertigen Molybdäns, Wolframs und Tantal. II. Mitteilung. Das 3-Molybdän-6-chlorid und seine Derivate"
DOI: 10.1002/zaac.19231300122

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Samuel M-F. Lo, Stephen S-Y. Chui, Lai-Yung Shek, Zhenyang Lin, Xi Xiang Zhang, Ge-hei Wen and Ian D. Williams
"Solvothermal Synthesis of a Stable Coordination Polymer with Copper-I-Copper-II Dimer Units: $[\text{Cu}_4\{1,4\text{-C}_6\text{H}_4(\text{COO})_2\}_3(4,4'\text{-bipy})_2]_n$ "
DOI: 10.1021/ja000416c

[457] *Metallacetate*

J. of Thermal Analysis 1991, #37-5, p. 1015 - 1023
M. Afzal, P. K. Butt and H. Ahmad
"Kinetics of thermal decomposition of metal acetates"
DOI: 10.1007/BF01932799
(Untersucht wurden $\text{Mg}(\text{OAc})_2 \times 4 \text{H}_2\text{O}$, $\text{Ni}(\text{OAc})_2 \times 4 \text{H}_2\text{O}$, $\text{Cu}_2(\text{OAc})_4 \times 2 \text{H}_2\text{O}$, $\text{Mn}(\text{OAc})_2 \times 4 \text{H}_2\text{O}$, $\text{Ba}(\text{OAc})_2$ und $\text{NaOAc} \times 3 \text{H}_2\text{O}$.)

Metallnitrate, wasserfrei

Eine breite Zusammenfassung gibt Kurt Stern:

J. Phys. Chem. Ref. Data 1972, #1-3, p. 747 - 772

Kurt H. Stern

"High Temperature Properties and Decomposition of Inorganic Salts Part 3, Nitrates and Nitrites"

DOI: 10.1063/1.3253104

Untersucht bzw. beschrieben: Nitrate von Al^{3+} , Ba^{2+} (auch Nitrit), Be^{+2} , (Bi^{3+}) , Cd^{2+} (auch Nitrit), Ca^{2+} , Cs^+ (auch CsNO_2), Cr^{3+} , Co^{2+} , Cu^{2+} , Ga^{2+} , Au^{3+} , $(\text{Hf}^{4+} (\text{Hf}(\text{NO}_3)_4 \times \text{N}_2\text{O}_5))$, In^{3+} , (Fe^{3+}) , Pb^{2+} (auch Nitrit), Li^+ (auch LiNO_2), Mg^{2+} , Mn^{2+} , Hg^{2+} , Ni^{2+} (auch Nitrit), Pd^{2+} (auch Verweis auf Nitrit), (Po^{4+}) , K^+ (auch KNO_2), Ra^{2+} , Nitrite von RE^{3+} (La, Pr, Nd, Sm, Dy, Yb), Nitrate der RE^{3+} (La, Nd, Dy, Yb, Lu), Rb^+ (auch Nitrit), Sc^{3+} , Ag^+ (auch Nitrit), Na^+ (ebenfalls mit Nitrit), Sr^{2+} (und Nitrit), Th^+ (Verweis auf Nitrit), Sn^{4+} , Ti^{4+} , Zn^{2+} und Zr^{4+} .

Metallnitrate mit Kristallwasser

J. of Thermal Analysis and Calorimetry 2015, #119-2, p. 1053 - 1061 (kostenfrei zugänglich)

Barbara Małeczka, Agnieszka Łącz, Ewa Drożdż and Andrzej Małeczki

"Thermal decomposition of d-metal nitrates supported on alumina"

DOI: 10.1007/s10973-014-4262-9

Untersucht: Nitrate von Ni²⁺, Co²⁺, Zn²⁺, Cu²⁺, Mn²⁺ (alle mit Kristallwasser)

[458] Inorg. Chem. 1999, #38-20, p. 4608 - 4611

Jack Y. Lu, Brenda R. Cabrera, Ru-Ji Wang and Jing Li

"Cu-X-bpy (X = Cl, Br; bpy = 4,4'-bipyridine) Coordination Polymers: The Stoichiometric Control and Structural Relations of [Cu₂X₂(bpy)] and [CuBr(bpy)]"

DOI: 10.1021/ic990536p

[459] a) <https://de.wikipedia.org/wiki/DMSO>

Abschnitt "chemische Eigenschaften", explosionsartige Zersetzung von DMSO, katalysierte Zersetzung, DMSO und Metallnitrate / -perchlorate und andere (Stand Okt 2015)

b) eigene Erfahrungen bei DMSO-bezogenen Unfällen von Kollegen im Labor

[460] Persönliche Gespräche / Korrespondenz mit Alexandr Vinogradov. Er bestätigte auch bei seinen Untersuchungen in St. Petersburg (ITMO) ein solches Verhalten.

[461] Zusätzlich zu den bei^[457] genannten Schriften hier speziell für das System Mn(NO₃)₂

a) [https://de.wikipedia.org/wiki/Mangan\(II\)-nitrat](https://de.wikipedia.org/wiki/Mangan(II)-nitrat)

Die Wikipedia bezieht sich in ihrer Angabe von 140 °C auf die GESTIS-Datenbank, die jedoch auch nur eine eher vage Angabe zur Substanz macht, und dabei auch die Kristallwassergehalte nicht explizit einbezieht.

b) Thermochemica Acta 1971, #2-5, p. 405 - 412

P. K. Gallagher, F. Schrey and B. Prescott

"The thermal decomposition of aqueous manganese (II) nitrate solution"

DOI: 10.1016/0040-6031(71)85016-5

c1) Eine vierteilige Veröffentlichung zu Mn(NO₃)₂:

Thermochemica Acta 1981, #45-3, p. 265 - 278

T. J. W. De Bruijn, W. A. De Jong and P. J. Van Den Berg

"Thermal decomposition of aqueous manganese nitrate solutions and anhydrous manganese nitrate. Part 1. Mechanism"

DOI: 10.1016/0040-6031(81)85087-3

c2) Thermochemica Acta 1981, #45-3, p. 279 - 292

T. J. W. De Bruijn, G. M. J. De Ruiter, W. A. De Jong and P. J. Van Den Berg

"Thermal decomposition of aqueous manganese nitrate solutions and anhydrous manganese nitrate. Part 2. Heats of reaction"

DOI: 10.1016/0040-6031(81)85088-5

c3) Thermochemica Acta 1981, #45-3, p. 293 - 303

T. J. W. De Bruijn, A. N. Ipekoğlu, W. A. De Jong and P. J. Van Den Berg

"Thermal decomposition of aqueous manganese nitrate solutions and anhydrous manganese nitrate. Part 3. Isothermal kinetics"

DOI: 10.1016/0040-6031(81)85089-7

c4) Thermochemica Acta 1981, #45-3, p. 305 - 314

T. J. W. De Bruijn, A. N. Ipekoğlu, W. A. de Jong and P. J. Van Den Berg

"Thermal decomposition of aqueous manganese nitrate solutions and anhydrous manganese nitrate. Part 4. Non-isothermal kinetics"

DOI: 10.1016/0040-6031(81)85090-3

d) Thermochemica Acta 1992, #196-2, p. 503 - 509

J. Pelovski, O. Matova and St. Shoumkov

"Thermal decomposition of aqueous solutions of manganese(II) nitrate"

DOI: 10.1016/0040-6031(92)80112-A

[462] JACS 1976, #98-21, p. 6729 - 6731 (S. 6731 oben links)

Shigeru Baba and Ei-Ichi Negishi

"A novel stereospecific alkenyl-alkenyl cross-coupling by a palladium- or nickel-catalyzed reaction of alkenylboranes with alkenyl halides"
DOI: 10.1021/ja00437a067

- [463] Chem. Comm. 1976, p. 596b - 967b (S. 597b unten rechts)
Ei-ichi Negishi and Shigeru Baba
"Novel stereoselective alkenyl-aryl coupling via nickel-catalysed reaction of alkenylboranes with aryl halides"
DOI: 10.1039/C3976000596B
- [464] Tet. Lett. 1979, #20-36, p. 3437 - 3440
Norio Miyaura, Kinji Yamada and Akira Suzuki
"A new stereospecific cross-coupling by the palladium-catalyzed reaction of 1-alkenylboranes with 1-alkenyl or 1-alkynyl halides"
DOI: 10.1016/S0040-4039(01)95429-2
- [465] Synth. Commun. 1981, #11-7, p. 513 - 519
Noyori Miyaura, Teiji Yanagi and Akira Suzuki
"The Palladium-Catalyzed Cross-Coupling Reaction of Phenylboronic Acid with Haloarenes in the Presence of Bases"
DOI:10.1080/00397918108063618
- [466] Nachr. 2002, #50-10, p. 1122 - 1127
Valentin Wittmann
"Neues von der Suzuki-Reaktion"
DOI: 10.1002/nadc.20020501016
(<http://kops.uni-konstanz.de/handle/123456789/9612> freiheitlich zugänglich; CC-BY-NC-ND 2.0)
- [467] a) Christoph Elschenbroich
"Organometallchemie" 6. Auflage
S. 603 ff.
- b) Reinhard Brückner
"Reaktionsmechanismen ..."
3 Auflage, S. 701 ff.
Elsevier, München 2004, ISBN 3-8274-1579-9
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Brad P. Carrow and John F. Hartwig
"Distinguishing Between Pathways for Transmetalation in Suzuki-Miyaura Reactions"
DOI: 10.1021/ja1108326
- [469] Chem. Soc. Rev. 2014, #43, p. 412 - 443 (freiheitlich zugänglich CC-BY-Lizenz)
Alastair J. J. Lennox and Guy C. Lloyd-Jones
"Selection of boron reagents for Suzuki-Miyaura coupling"
DOI: 10.1039/c3cs60197h
(Nomenklatur S. 414 oben.)
(Boroxine als aromatische Grenzstruktur S. 422 oben links.)
- [470] Chem. Rev. 1995, #95-7, p. 2457 - 2483
Norio Miyaura and Akira Suzuki
"Palladium-Catalyzed Cross-Coupling Reactions of Organoboron Compounds"
DOI: 10.1021/cr00039a007
(Gleichgewicht cis ↔ trans S. 2461 Gln. 24)
(Aminbase und Produktselektivität S. 2461 Tab. 1, unten rechts)
(Aminbase und Halo-en-one / Alkenylboronat S. 2464 oben bis Mitte, links)
- [471] Cat. Comm. 2015, #58-5, p. 154 - 157
Man Wang, Xiaobin Yuan, Hongyu Li, Limin Ren, Zhizhong Sun, Yanjun Hou and Wenyi Chu
"Nickel-catalysed Suzuki-Miyaura cross-coupling reactions of aryl halides with arylboronic acids in ionic liquids"
DOI: 10.1016/j.catcom.2014.08.037

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Christian Amatore, Anny Jutand and Mohamed Amine M'Barki
"Evidence of the formation of zerovalent palladium from Pd(OAc)₂ and triphenylphosphine"
DOI: 10.1021/om00045a012
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Fu-She Han
"Transition-metal-catalyzed Suzuki-Miyaura cross-coupling reactions: a remarkable advance from palladium to nickel catalysts"
DOI: 10.1039/C3CS35521G
(Bei den Nickel-gestützten Kupplungen scheint sich besonders [NiCl₂(dppp)] hervorzutun.)
- [474] a) Angew. 2003, #115-12, p. 1445 - 1447
Nicholas E. Leadbeater and Maria Marco
"Transition-Metal-Free Suzuki-Type Coupling Reactions"
DOI: 10.1002/ange.200390334
und Cover
(ACIE 2003, #42-12, p. 1407 - 1409 (kostenfrei zugänglich); dito, dito; DOI: 10.1002/anie.200390362)
und Cover der ACIE 12/2003 (#42-12, p. 1319)
- b) JOC 2003, #68-14, p. 5660 - 5667
Nicholas E. Leadbeater and Maria Marco
"Transition-Metal-Free Suzuki-Type Coupling Reactions: Scope and Limitations of the Methodology"
DOI: 10.1021/jo034230i
- [475] Haraldur Gunnar Guðmundsson
"The Suzuki-Miyaura Reaction And Boron Reagents - Mechanism, Synthesis And Application"
<http://anderson.chem.ox.ac.uk/files/reviews/hg-tt14-suzuki-boron.pdf>
<http://anderson.chem.ox.ac.uk/group.html>
(Stand Sept. 2015)
- [476] JOC 1998, #63-3, p. 458 - 460
Brian H. Ridgway and Keith A. Woerpel
"Transmetalation of Alkylboranes to Palladium in the Suzuki Coupling Reaction Proceeds with Retention of Stereochemistry"
DOI: 10.1021/jo970803d
- [477] Appl. OMC 2011, #25-11, p. 283 - 288
Pankaj Das, Chandan Sarmah, Archana Tairai and Utpal Bora
"Highly efficient amine-based catalytic system for room temperature Suzuki-Miyaura reactions of aryl halides with arylboronic acids"
DOI: 10.1002/aoc.1755
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Alastair J. J. Lennox and Guy C. Lloyd-Jones
"Transmetalation in the Suzuki-Miyaura Coupling: The Fork in the Trail"
DOI: 10.1002/anie.201301737
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dito
"Transmetallierung in der Suzuki-Miyaura-Kupplung: Gabelung des Reaktionsverlaufs"
DOI: 10.1002/ange.201301737
- [479] JACS 2002, #124-46, p. 13662 - 13663
Jan H. Kirchhoff, Matthew R. Netherton, Ivory D. Hills and Gregory C. Fu
"Boronic Acids: New Coupling Partners in Room-Temperature Suzuki Reactions of Alkyl Bromides. Crystallographic Characterization of an Oxidative-Addition Adduct Generated under Remarkably Mild Conditions."
DOI: 10.1021/ja0283899
- [480] Christian Amatore, Anny Jutand and Gaëtan Le Duc
"The Triple Role of Fluoride Ions in Palladium-Catalyzed Suzuki-Miyaura Reactions: Unprecedented Transmetalation from [ArPdFL₂] Complexes"
DOI: 10.1002/anie.201107202
(Angew. 2012, #124-6, p. 1408 - 1411; dito, dito; DOI: 10.1002/ange.201107202)

- [481] Nobel Lecture 2010, December 8, p. 206 - 235 (Deboronierung S. 216, Abschnitt Kupplung mit ster. Hinderung oder EWG)
Akira Suzuki
"Cross-Coupling Reactions of Organoboranes: An Easy Way for C-C Bonding"
http://www.nobelprize.org/nobel_prizes/chemistry/laureates/2010/suzuki-bio.html
http://www.nobelprize.org/nobel_prizes/chemistry/laureates/2010/suzuki-lecture.html
(Stand April 2015)
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F. C. Fischer and Egbertus Havinga
"Pyridineboronic Acids"
DOI: 10.1002/recl.19650840407
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F. C. Fischer and Egbertus Havinga
"Thermal and photoinduced deboronations of some pyridine- and benzeneboronate anions"
DOI: 10.1002/recl.19740930110
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Henry G. Kuivila and K. V. Nahabedian
"Electrophilic Displacement Reactions. X. General Acid Catalysis in the Protodeboronation of Areneboronic Acids"
DOI: 10.1021/ja01470a028
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Henry G. Kuivila, Joseph F. Reuwer (Jr.) and John A. Mangravite
"Electrophilic Displacement Reactions: XV. Kinetics And Mechanism Of The Base-Catalyzed Protodeboronation Of Areneboronic Acids"
DOI: 10.1139/v63-451
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Henry G. Kuivila, Joseph F. Reuwer (Jr.) and John A. Mangravite
"Electrophilic Displacement Reactions. XVI. Metal Ion Catalysis in the Protodeboronation of Areneboronic Acids"
DOI: 10.1021/ja01067a031
- [487] Org. Lett. 2006, #8-18, p. 4071 - 4074
Andrew N. Cammidge, Victoria H. M. Goddard, Hemant Gopee, Nicola L. Harrison, David L. Hughes, Christopher J. Schubert, Benjamin M. Sutton, Gary L. Watts and Andrew J. Whitehead
"Aryl Trihydroxyborates: Easily Isolated Discrete Species Convenient for Direct Application in Coupling Reactions"
DOI: 10.1021/ol061564w
(siehe auch CIF-file in den supplementary informations)
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Jerome Lozada, Zhibo Liu and David M. Perrin
"Base-Promoted Protodeboronation of 2,6-Disubstituted Arylboronic Acids"
DOI: 10.1021/jo500734z
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Su-Jin Ahn, Chun-Young Lee, Nak-Kyoon Kim and Cheol-Hong Cheon
"Metal-Free Protodeboronation of Electron-Rich Arene Boronic Acids and Its Application to ortho-Functionalization of Electron-Rich Arenes Using a Boronic Acid as a Blocking Group"
DOI: 10.1021/jo500780b
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Gary Noonan and Andrew G. Leach
"A mechanistic proposal for the protodeboronation of neat boronic acids: boronic acid mediated reaction in the solid state"
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