

Selected Publications

1) Capillary Electrochromatographic Separation of Ionizable Compounds with Molecular Imprinted Monolithic Column.

Yan, Weiyang; Gao, Ruyun; Yan, Chao. *J. Sep. Sci.* 26, 1, **2003**.

2) Separation of Peptides by Pressurized Capillary Electrochromatography.

Zhang, Kai; Jiang, Zheng-jin; Yao, Chuanyi; Zhang, Zhi-chao; Wang, Qin-sun; Gao, Ru-yu; Yan, Chao. *J. Chromatogr. A.*, 987, 453, **2003**.

3) Mixed Mode of Hydrophilic and Ionic Interaction Pressurized Capillary Electrochromatography for Separation of Basic Compounds.

Kai Zhang, Chao Yan, Zhichao Zhang, Qinsun Wang, Ruyun Gao, *J. of Liquid Chromatogr.*, 26 (13), 2119, **2003**.

4) Quantitative Sample Injection for Capillary Electrophoresis.

Yao, Chuanyi; Gao, Ruyun; Yan, Chao. *J. Sep. Sci.* 26(1-2), 37, **2003**.

5) Separation of Basic Drugs using Pressurized Capillary Electrochromatography.

Kai Zhang, Chao Yan, Chuanyi Yao, Zhengjin Jiang, Zhichao Zhang, Qinsun Wang, Ruyun Gao, *Chinese J. of Chemistry*, 21(4): 419, **2003**.

6) Application of Gradient Pressurized Capillary Electrochromatography.

Kai Zhang, Chao Yan, Zhichao Zhang, Qinsun Wang, Ruyun Gao, *Chinese Chemical Letters*, 14 (6), 611, **2003**.

7) Pressurized Capillary Electrochromatography Separation of Peptides with Strong Cation Exchange and Hydrophilic Interaction.

Kai Zhang, Ruyun Gao, Zhengjin Jiang, Chuanyi Yao, Zhichao Zhang, Qinsun Wang, Chao Yan, *J. Sep. Sci.* 26, 1389, **2003**.

8) Separation of Peptides by Reversed Phase pCEC.

Kai Zhang, Chao Yan, Zhichao Zhang, Qinsun Wang, Ruyun Gao, *Journal of Instrumental Analysis*. 22 (3), 32, **2003**.

9) CEC and its Application in Analysis of Biological Samples

Chapter 7 in Book: *Modern Methods of Separation and Analysis for Biological Samples*, Zhengjin Jiang, Vernon Jiang and Chao Yan, Editor: Yukui Zhang, Science Publishing Co., **2003**

10) Pressurized Capillary Electrochromatography: Theory, Mechanism, and Application in Enantiomeric Separations

Chuanyi Yao, Kai Zhang, Ruyun Gao, Chun Jiang, Yukui Zhang, Chao Yan

Anal. Chem., Submitted, **2004**

11) Cinnamic Acid Polymer-based Monolithic Column for Capillary Electrochromatography

Weiying Yan, Ruyi Gao, Zhichao Zhang, Chao Yan, Qingsun Wang, *Cromatographia*, 57 (11), 819, **2003**

12) Development of a Precolumn Derivatization Method for the Determination of Free Amines in Wastewater by High-Performance Liquid Chromatography via Fluorescent Detection with 9-(2-Hydroxyethyl)acridone.

You, Jinmao; Zhang, Weibing; Zhang, Qinghe; Zhang, Lin; Yan, Chao; Zhang, Yukui. *Anal. Chem.*, 74(1), 261, **2002**.

13) Short, Highly Cross-linked, Polymer based Monolithic column for Capillary Electrochromatography

Weiying Yan, Zhichao Zhang, Ruyi Gao, Chao Yan and Qin-sun Wang, *J. of Liq. Chromatogr. & Related Technologies*, 25 (19), 2963, **2002**.

14) Enantioseparations in Non-aqueous Media of Chiral Pharmaceuticals by Pressurized Capillary Electrochromatography

Lei Kang, Chuanyi Yao, Chao Yan and Ruyi Gao, *Chemical Journal of Internat*, 4 (12), 58, **2002**.

15) Separation of pyridazinone derivatives using pressurized gradient capillary electrochromatography.

Jiang, Zhengjin; Gao, Ruyi; Zhou, Yibo; Zhang, Zhichao; Wang, Qinsun; Yan, Chao. *Journal of Microcol. Sep.*, 13 (5), 191, **2001**.

16) Enantiomeric separations of 1-1,2,4-triazole compounds by micro-high performance liquid chromatography.

Chao Yan, *Chinese J. of Chromatogr.* , 19(3), 253, **2001**

17) Calculation of retention factors for charged solutes in capillary electrochromatography.

Wei, Wei; Luo, Guoan; Chao, Yan. *J. Sep. Sci.*, 24(3), 203, **2001**

18) Investigation on Separation of Peptides by SCX-Capillary Electrochromatography

Kai Zhang, Zhichao Zhang, Qinsun Wang, Ruyi Gao, Chuanyi Yao, Zhengjin Jiang, Wenyu Xue, Chao Yan, *Analytical Laboratory*. 20 , 142, **2001**

19) Pressurized gradient capillary electrochromatographic separation of eighteen amino acid derivatives.

Ru, Q.-H.; Yao, J.; Luo, G.-A.; Zhang, Y.-X.; Yan, C. *J. Chromatogr., A*, 894(1+2), 337, **2000**

20) Separation of related opiate compounds using capillary electrochromatography.

Lim, Jong-Tae; Zare, Richard N.; Bailey, Christopher G.; Rakestraw, David J.; Yan, Chao. *Electrophoresis*, 21(4), 737, **2000**

21) Gradient elution in capillary electrochromatography.

Anex, Deon; Rakestraw, David J.; Yan, Chao; Dadoo, Rajeev; Zare, Richard N. [Tech. Rep.] SAND, SAND97-8276, 1-3, 5-26, **1997**.

22) Sensitive, universal detection for capillary electrochromatography using condensation nucleation light scattering detection.

Guo, Wei; Koropchak, J. A.; Yan, Chao. *J. Chromatogr., A*, 849(2), 587, **1999**

23) Determination of sulfonylurea herbicides by capillary electrochromatography.

Lopez-Avila, Viorica; Benedicto, Janet; Yan, Chao. *J. Chromatogr. Sci.*, 37(5), 165, **1999**

24) Capillary electrochromatography: operating characteristics and enantiomeric separations.

Lelievre, Frederic; Yan, Chao; Zare, Richard N. *J. Chromatogr., A*, 723(1), 145, **1996**

25) Enantiomer separations of phenylephrine and synephrine by capillary electrochromatography on bare silica stationary phase using hydroxypropyl-b-cyclodextrin as a mobile phase additive.

Wei, Wei; Luo, Guoan; Xiang, Rong; Yan, Chao. *J. Microcol. Sep.*, 11(4), 263, **1999**

26) Capillary electrochromatographic retention behavior of several aromatic compounds on cyanopropyl-bonded phase.

Wei, Wei; Wang, Yiming; Luo, Guo'an; Zhou, Yuhua; You, Huiyan; Yan, Chao. *Chinese Journal of Chromatography*, 16(6), 520, **1998**

27) Enantiomeric Separation of β Amine Alcohols by Capillary Zone Electrophoresis Using Cyclodextrin as Chiral Selector

Wei, W.; Luo, G. A.; Yan, C. J. *High Resol. Chromatogr.*, 21(8), 440, **1998**

28) Advances in Capillary Electrochromatography: Rapid and High-Efficiency Separations of PAHs.

Dadoo, Rajeev; Zare, Richard N.; Anex, Deon S.; Yan, Chao. *Anal. Chem.*, 70(22), 4787, **1998**

29) Capillary electrochromatographic separation of basic compounds with bare silica as stationary phase.

Wei, W.; Luo, G. A.; Hua, G. Y.; Yan, C. J. *J. Chromatogr., A*, 817(1 + 2), 65, **1998**

30) Retention prediction based on the solvatochromic comparison method in reversed-phase capillary electrochromatography.

Wei, W.; Wang, Y. M.; Luo, G. A.; Wang, R. J.; Guan, Y. H.; Yan, C. J. *Liq. Chromatogr.*,

21(10), 1433, **1998**

31) Separation of Explosives Using Capillary Electrochromatography.

Bailey, Christopher G.; Yan, Chao. *Anal. Chem.*, 70(15), 3275, **1998**

33) Capillary electrochromatography on unmodified silica gel packed column with reversed elution.

Wei, Wei; Wang, Yiming; Luo, Guoan; Yan, Chao. *Chinese J. Anal. Chem.*, 26(3), 287, **1998**

33) Ion-exchange capillary electrochromatography with a strong cation exchanger packed column.

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39) Gradient Elution in Capillary Electrochromatography.

Yan, Chao; Dadoo, Rajeev; Zare, Richard N.; Rakestraw, David J.; Anex, Deon S. *Anal. Chem.*, 68(17), 2726, **1996**.

40) Automated capillary electrochromatography: reliability and reproducibility studies.

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41) Capillary Electrochromatography: Analysis of Polycyclic Aromatic Hydrocarbons.

Yan, Chao; Dadoo, Rajeev; Zhao, Hui; Zare, Richard N.; Rakestraw, David J. *Anal. Chem.*, 67(13), 2026, **1995**.

42) Electrochromatography and micro high-performance liquid chromatography with 320 mm I.D. packed columns.

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54) Advances in Pressurized Capillary Electrochromatography: Theory, Instrumentation, Column and Applications

Chao YAN, Junjiao YANG, Chuanyi Yao, Yukui ZHANG, Kai ZHANG and Ruyu Gao, Proceedings of International Beijing Conference and Exhibition on Instrumental Analysis, Beijing, China, Oct. 13-16, **2003**

55) Preparation of Monolithic Column and Its Application in p-CEC

Junjiao YANG, Xiuli Wang, Yukui ZHANG, Chao YAN , Proceedings of International Beijing Conference and Exhibition on Instrumental Analysis, Beijing, China, Oct. 13-16, **2003**

56) Separation of Green Tea Extract by Pressurized Capillary Electrochromatography (pCEC)

Xiuli Wang, Junjiao YANG, Ping Fang, Xuehua Jiang, Yukui ZHANG and Chao YAN , Proceedings of International Beijing Conference and Exhibition on Instrumental Analysis, Beijing, China, Oct. 13-16, **2003**

60) Preparation of Monolithic Column and Its Application in p-CEC.

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67) Advances in pressurized capillary electrochromatography: theory, instrumentation, column and applications

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71) Separation of Peptides by pressurized capillary electrochromatography

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73) Chiral Separation of Binaphthol Enantiomers on Molecularly Imprinted Polymer Monolith by Capillary Electrochromatography

Zhao-Sheng Liu, Yan-Li Xu, Chao Yan, Ru-Yu Gao , Analytical Sciences, 2004, 20(4),673-678

74) Capillary electrochromatography of molecularly imprinted monolithic column using p-hydroxybenzoic acid as templates

Zhao-Sheng Liu, Yan-Li Xu, Chao Yan², Ru-Yu Gao , Chinese Chemical Lett, 2004, (in press)

75) Preparation and characterization of molecularly omprinted monolithic column using 4-hydroxybenzoic acid as templates for capillary electrochromatography

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Chao Yan, Chuangi Yao, Zhengjin Jiang, Kai Zhang and Ruyu Gao , BCEIA (9th Beijing Conference and Exhibition on Instrumental Analysis) (2001)D137

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Chuanyi Yao, Ruyu Gao , Chao Yan , BCEIA (9th Beijing Conference and Exhibition on Instrumental Analysis) (2001)D145

85) Pressurized Capillary Electrochromatographic Separation of Five Peptides

Kai Zhang Zhengjin Jiang, Chuany Yao and Wenyu Xue , Ruyu Gao, Chao Yan , BCEIA (9th

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86) Gradient pressurized CEC separation of six peptides

Kai Zhang Zhengjin Jiang, Chuanyao and Wenyu Xue, Ruyu Gao, Chao Yan, 26th International Symposium on HPLC and Relative Techniques (2002) Montreal, Canada, No.99

87) Capillary Electrochromatography: Advances in Instrumentation and Stationary Phases

Chao Yan, Xiuli Wang, Ruyu Gao, Yukui Zhang

Invited Speaker, 227th ACS National Meeting, Anaheim, CA, March 28-April 1, 2004.

89) Recent Advances in Capillary Electrochromatography

Chao Yan, Ruyu Gao, Yukui Zhang

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91) An Review on Capillary Electrochromatography

Chao Yan

Invited Speaker, 1st International Symposium on Capillary Electrochromatography, San Francisco, CA, 1998.

92) Capillary Electrochromatography and Its Applications

Chao Yan

Invited Speaker, 2nd International Symposium on Capillary Electrochromatography, San Francisco, CA, 1999.

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Chao Yan

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94) Pressurized Electrochromatography Coupled with Electrospray Ionization Mass Spectrometry for Analysis of Peptides and Proteins

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