

Referências Bibliográficas

1. Oliveira, A.G., Scarpa, M.V., Corre, M.A., Cera, L.F.R., Formariz, T.P., Microemulsões: Estrutura e aplicações como sistema de liberação de fármacos. *Quím. Nova*, 27, p131-138, 2004.
2. Ramos, G.R., Khasawneh, I.M., García-Álvarez-Coque, M.C., Winefordner, J.D., Room-temperature phosphorimetry of polyaromatic hydrocarbons with organized media and paper substrate: A comparative study, *Talanta* 35, p 41-46, 1988.
3. Segura-Carretero, A., Cruces-Blanco, C., Sánchez-Polo, M., Ávila-Rosón, J.C., Gutiérrez, A.F., Study of different normal-microemulsion compositions by room-temperature phosphorescence to determine benzo[*a*]pyrene in environmental samples, *Anal. Chim. Acta*, 474, p 91-98, 2002.
4. Hurtubise, R.J., Phosphorimetry, *Anal. Chem.*, 55, p 669-680, 1983.
5. Cline Love, L.J., Skrilec, M., Habarta, J.G., Analysis of micelle-stabilized room temperature phosphorescence in solution, *Anal. Chem.*, 52, p 754-759, 1980.
6. Ward, J.L., Walden, G.L., Winefordner, J.D., A review of recent uses of phosphorimetry for organic analysis, *Talanta*, 28, p 201-208, 1981.
7. Fernández de la Campa, M.R., Ming Liu, Y. Díaz García, M.E., Sanz-Medel, A., Fluorescence and liquid room-temperature phosphorescence of the aluminium-ferron chelate in vesicles, *Anal. Chim. Acta*, 238, p 297-305, 1990.
8. Cardoso, C. E., Utilização de técnicas analíticas luminescentes para quantificar e identificar compostos de N e S em petróleos e derivados, Exame de Qualificação, PUC - Rio, 2004.
9. Cruces-Blanco, C., Segura-Carretero, A., Fernández-Gutiérrez, A., Experimental design applied to a room-temperature phosphorimetric

- method for the determination of acenaphthene in a microemulsion, Anal. Chim. Acta, 318, p 357-363, 1996.
10. Segura-Carretero, A., Cruces-Blanco, C., Fernández-Gutiérrez, A., Determination of the plant growth regulator β -naphthoxyacetic acid by micellar-stabilized room temperature phosphorescence, Talanta, 43, p 1001-1007, 1996.
11. Segura-Carretero, A., Cruces-Blanco, F., Alés-Barrero, F., Fernández-Gutiérrez, A., Method for the quantitative determination of 1-naphthaleneacetic acid spiked canned pineapple samples by micelle-stabilized room temperature phosphorescence, J. Agric. Food Chem., 46, p 561-565, 1998.
12. Carlsson, H., Östman, C., Clean-up and analysis of carbazole and acridine type polycyclic aromatic nitrogen heterocyclics in complex sample matrices, Journal of Chromatography A, 790, p 73-82, 1997.
13. Kozin, I., Larsen, O., Cees-Gooijer, P., Velthorst, N., Isomer-specific detection of azaarenes in environmental samples by Shpol'skii luminescence spectroscopy, Anal. Chim. Acta, 354, p 181-187, 1997.
14. Salinas-Castillo, A., Segura-Carretero, A., Costa-Fernández, J. M., Wei Jun Jin, Fernández-Gutiérrez, A., Heavy atom induced room temperature phosphorescence: a tool for the analytical characterization of polycyclic aromatic hydrocarbons, Anal. Chim. Acta, 516, p 213-220, 2004.
15. Rocha, E., O problema do tabagismo – O tabaco e a saúde, Série III, 6, 3-10, 2001.
16. Trindade, C. Avaliação do tempo de residência de derrames de óleo no mar, através do monitoramento de parâmetros geoquímicos – testes laboratoriais, 2005.
17. Alves, L., Mesquita, E., G, Dessulfurização bacteriana de combustíveis fósseis, Boletim de Biotecnologia Ambiental, 62, p 3-8, 1999.
18. Pereira, A., Moreira, J., Dias, A., Arbilla, G., Ferreira, L., Oliveira, A., Barek, J., Avaliação da contaminação humana por hidrocarbonetos policíclicos aromáticos (HPAS) e seus derivados nitrados (NHPAS): Uma revisão metodológica, Química Nova, 23, p 765-773, 2000.

19. Oliveira, E., Vaz de Campos, M., Sant'Ana, A., Goreti, M., Bastos, E., Ion-exchange resins in the isolation of nitrogen compounds from petroleum residues. *Journal of Chromatography A*, 1027, p 171-177, 2004.
20. Hwang, R. J., Heidrick, T., Mertani, B., Qivayanti and Li, M., Correlation and migration studies of North Central Sumatra oils, *Organic Geochemistry*, 33, p 1361-1379, 2002.
21. Clegg, H., Horsfield, B., Wilkes, H., Damsté, J. S., Koopmans, M., Effect of artificial maturation on carbazole distributions, as revealed by the hydrous pyrolysis of an organic-sulphur-rich source rock (Ghareb Formation, Jordan), *Organic Geochemistry*, 29, p 1953-1960, 1998.
22. Smirnov, M., Frolov, B., A complete analysis of a crude oil C₂-carbazole fraction by ¹H NMR spectroscopy, *Organic Geochemistry*, 29, p 1091-1099, 1998.
23. Dorbon, M., Schmitter, J. M., Garrigues, P., Ignatiadis, I., Ewald, M., Arpino, P., Guiochon, G., Distribution of carbazole derivatives in petroleum, *Organic Geochemistry*, 7, p 111-120, 1984.
24. Chakhmakhchyan, A., Suzuki, N., Aromatic sulfur compounds as maturity indicators for petroleums from the Buzuluk depression, Russia, *Organic Geochemistry*, 23, p 617-625, 1995.
25. Leite, A., Moitinho, T., Bonifácio, O., Cloning and expression of meta-cleavage enzyme (CarB) of carbazole degradation pathway from *Pseudomonas stutzeri*, *Brazilian Archives of biology and technology*, 48, p 127-134, 2005.
26. Vo-Dinh, T., Fetzer, J., Campiglia, A., Monitoring and characterization of polycyclic aromatic compounds in the environment, *Talanta*, 47, p 943-969, 1998.
27. Bishop, M., Environmental Analytical Methods for organics and metals, New England Testing Laboratory, relatório, 1997.
28. Segura-Carretero, A., Cruces-Blanco, C., Fernández-Gutiérrez, A., Simultaneous microemulsion room temperature phosphorimetric determination of five polycyclic aromatic hydrocarbons by variable-angle synchronous scanning, *Anal. Chim. Acta*, 353, p 337-344, 1997.
29. Pelizzetti, E., Pramauro, E., Analytical applications of organized molecular assemblies, *Anal. Chim. Acta*, 169, p 1-29, 1985.

30. Ramasamy, S., Hurtubise, R., Room-temperature phosphorescence of nitrogen heterocycles and aromatic amines, *Anal. Chem.*, 54, p 1642-1644, 1982.
31. Vo-Dinh, T., Miller, G. H., Abbott, D. W., Moody, R. L., Ma C. Y., Ho, C. H., Luminescence determination of Benzoquinolines isomers in complex samples, *Anal. Chim. Acta*, 175, p 181-188, 1985.
32. Thoe S., Hurtubise, R., The solid-matrix room-temperature luminescence detection and characterization of polycyclic aromatic hydrocarbons without a heavy atom, *Talanta*, 41, p 595-598, 1994.
33. Yang, Y., D'Silva, A., Fassel, V., Laser-excited Shpol'skii spectroscopy for the selective excitation and determination of polynuclear aromatic hydrocarbons, *Anal. Chem.*, 53, p 894-899, 1981.
34. O'Leary, M., Creaven, B., Room temperature phosphorescence of substituted polycyclic aromatic hydrocarbons on modified substrates, *Anal. Proceedings*, 30, p 147-149, 1993.
35. Hurtubise, R., *Phosphorimetry: Theory, instrumentation, and applications*. VCH Publishers: New York, 1990.
36. Shulman, S., *Fluorescence and phosphorescence spectroscopy: Physicochemical principles and practice*. Oxford: Pergamon Press, 1975.
37. Femia R., Cline Love, J., Micelle-stabilized room-temperature phosphorescence with synchronous scanning, *Analytica Chemistry*, 56, p 327-33, 1984.
38. Díaz-García, M., Sanz-Medel, A., Facile chemical deoxygenation of micellar solutions for room temperature phosphorescence, *Anal. Chem.*, 58, p 1436-1440, 1986.
39. Hurtubise, R., Room-temperature and fluorescence of nitrogen heterocyclics adsorbed on silica gel chromatoplates, *Talanta*, 28, p 145-148, 1981.
40. Skrilec, M., Cline Love, J., Micelle-Stabilized room-temperature phosphorescence characteristics of carbazole and related derivatives, *J. Phys.Chem.*, 85, p 2047-2050, 1981.
41. Mallik, G. K., Pal, T. K., Laha, S., Ganguly, T., Banerjee, S. B., External heavy atom effect on the emission of carbazole, *Journal of Luminescence*, 33, p 377-390, 1985.

42. Boutilier, G., Winefordner, J., *Analyst*, 51, p 1384-1390, 1979.
43. Scypinski, S., Cline Love, L., Room-temperature phosphorescence of polynuclear aromatic hydrocarbons in cyclodextrins, *An. Chem.*, 56, p 322-327, 1984.
44. O'Reilly, T., Winefordner, J., *Anal. Chem.*, 44, p 948-952, 1980.
45. Segura-Carretero, A., Cruces-Blanco, C., Cañabate-Díaz, B., Fernández-Sánchez, J. F., Fernández-Gutiérrez, A., Heavy-atom induced room-temperature phosphorescence: a straightforward methodology for determination of organic compounds in solution, *Anal. Chim. Acta*, 417, p 19-30, 2000.
46. Skoog, D., Leary, J., *Análisis Instrumental*, McGraw-Hill: España, 1993.
47. Vo-Dinh, T., *Room temperature phosphorescence for chemical analysis*, Wiley: New York, 1984.
48. Glogauer, A., Síntese e caracterização fotofísica de dois copolímeros eletroluminescentes: um completamente conjugado e outro multibloco tendo como unidade cromofórica o fluoreno-vinileno-fenileno, *Dissertação de mestrado*, UFP, 2004.
49. Kasha, M., Collisional Perturbation of Spin-Orbital Coupling and the Mechanism of Fluorescence Quenching. A Visual Demonstration of the Perturbation, *J. Chem. Phys.*, 20, p 71-77, 1977.
50. Jablonsky, A., Molecular luminescence spectroscopy, *Z. Phys.*, 94, p 38, 1935.
51. Aucélio, R.Q., Desenvolvimento de métodos de dosagem de compostos fisiologicamente ativos baseados na fosforimetria na temperatura ambiente em superfície sólida, *Dissertação de Mestrado*, Instituto de Ciências Exatas, Departamento de Química, Brasília, 1995.
52. Li, L., Zhao, Y., Wu, Y., Tong, A., Non-protected fluid temperature phosphorescence of several naphthalene derivates, *Talanta*, 46, p 1147-1154, 1998.
53. Schulman, S., *Fluorescence and phosphorescence spectroscopy: Physicochemical principles and practice*, New York: Pergamon Press, 1977.
54. Parker, C., *Photoluminescence of solutions*, Elsevier Publishing Company: Amsterdam, 1968.

55. Jin, W., Wei, Y., Duan, W., Zhang, C., Study of naphthalene and phenanthrene by microemulsion room-temperature phosphorimetry, *Ana. Chim. Acta*, 287, p 95-100, 1994.
56. Segura-Carretero, A., Cruces-Blanco, C., Fernández-Gutiérrez, A., Application of derivative variable-angle synchronous scanning phosphorimetry in a microemulsion medium for the simultaneous determination of 2-naphthoxyacetic acid and 1-naphthalenacetamide, *Analyst*, 122, p 925-929, 1997.
57. Muñoz de la Peña, A., Espinosa-Mansilla, A., Murillo-Pulgarín, J.A., Alañón-Molina, A., Fernández-López, P., Determination of nafronyl in pharmaceutical preparations by means of stopped flow micellar-stabilized room temperature phosphorescence, *Analyst*, 123, p 2285-2290, 1998.
58. Salinas-Castillo, A., Fernández-Sánchez, J.F., Segura-Carretero, A., Fernández-Gutiérrez, A., Simple determination of the herbicide napropamide in water and soil samples by room temperature phosphorescence, *Pest Management Science*, 61, p 816-820, 2005.
59. Mendes, V., Desenvolvimento de métodos espectrofluorimétricos para a determinação de eritromicina e canamicina e aplicabilidade na vacina contra a febre amarela, *Dissertação de Mestrado*, PUC – Rio, 2005.
60. Rollie, M., *J. Chromatography*, 30, p 276-280, 1967.
61. Sanz-Medel, A., Martinez-García, P., Díaz-García, M., *Anal. Chem.* 58, p 1436-1440, 1986.
62. Segura-Carretero, A., Cruces-Blanco, C., Sánchez-Polo, M., Fernández-Gutiérrez, A., Study of microemulsion composition effect over phosphorescence emission of polycyclic aromatic compound, *Polycyclic Aromatic Compounds*, 23, p 237-248, 2003.
63. Atvards, T., Martelli, C., *Espectroscopia de luminescência*, 2002, disponível em <http://www.chemkeys.com/bra/md/ede_5/ede_5.htm> acesso outubro 2005.
64. Li, L., Chen, Y., Zhao, Y., Tong, A., Room-temperature phosphorescence of dansyl chloride solution in the absence of protective medium and its medium effect, *Anal. Chim. Acta*, 341, p 241-249, 1997.
65. Parker, C., Hatchad, C., Triplet-singlet emission in fluid solution, *J. of Physical Chemistry*, 66, p 2506-2511, 1962.

66. Clark, W., Litt, A., Steel, C., Triplet lifetimes of benzophenone, acetophenone, and triphenylene in hydrocarbons, *J. Am. Chem. Society*, 91, p 5413-5415, 1969.
67. Bonner, R., DeAdmond, M., Wahl, G., Phosphorescence of bridged biphenyls in fluid solution, *J. Am. Chem. Society*, 94, p 988-989, 1972.
68. Donkerbroek, J., Goojer, C., Velthorst, N., Frei, W., Some aspects of room-temperature phosphorescence in liquid solutions, *Talanta*, 28, p 717-723, 1981.
69. Cline Love, L., Skrilec, M., Habarta, J., Analysis by micelle-stabilized room temperature phosphorescence in solution, *Analytical Chemistry*, 52, p 754-759, 1980.
70. Kuijt, J., Ariese, F., Brinkman, U., Gooijer, C., Room temperature phosphorescence in the liquid state as a tool in analytical chemistry, *An. Chim. Acta*, 488, p 135-171, 2003.
71. Donkerbroek, J., Goojer, C., Velthorst, N., Frei, W., Sensitized room-temperature phosphorescence in liquid solutions with 1,4-dibromonaphthalene and byacetyl as acceptors, *Analytical Chemistry*, 54, p 891-895, 1982.
72. Li, L., Huang, W., Room temperature phosphorescence properties of dansylchloride and its derivatives. *An. Chim. Acta*, 312, p 345-350, 1995.
73. Segura-Carretero, A., Cruces-Blanco, C., Fernández-Gutiérrez, A., An innovative way of obtaining room-temperature phosphorescence signals in solution, *An. Chim. Acta*, 361, p 217-222, 1998.
74. Segura-Carretero, A., Cruces-Blanco, C., Fernández-Gutiérrez, A., Application of variable-angle synchronous phosphorimetry in a microemulsion medium for the simultaneous determination of three polycyclic aromatic hydrocarbons, *An. Chim. Acta*, 329, p 165-172, 1996.
75. IOC-UNESCO, Manual for monitoring oil and dissolved/dispersed petroleum hydrocarbons in marine waters and on beaches, UNESCO: Paris, 1984.
76. IAEA 417 Sediment Sample, Reference Sheet of organochlorine compound and petroleum hydrocarbons in sediment sample, Analytical Quality Control Services, 2002.

77. Gebara, L., Esteróis como marcadores moleculares da contaminação fecal no sistema estuarino Iguaçu-Sarapuí, noroeste da Baía de Guanabara (RJ), Dissertação de Mestrado, PUC – Rio, 2005.
78. Gomes de Oliveira; A., Scarpa; M. V., Correa; M. A., Rodrigues; L. F., Pedroni, T., Microemulsões: Estrutura e aplicações como sistema de liberação de fármacos, Química Nova, 27, p 131-138, 2004.
79. Cañabate-Díaz, B., Schulman, S. G., Segura-Carretero, A., Cruces-Blanco, C., Fernández-Gutiérrez, A., Facile analysis of carbazole in commercial anthracene by heavy atom-induced room temperature phosphorescence, Polycyclic Aromatic Compounds, 74, p 65-74, 2004.
80. Montgomery, D., Design and analysis of experiments, John Wiley & Sons: New York, 1996.
81. Barros, B., Spacino, I., Bruns, R., *Como fazer experimentos*, UNICAMP, 2003.
82. Segura-Carretero, A., Salinas-Castillo, A., Fernández-Gutiérrez, A., A review of heavy-atom-induced room-temperature phosphorescence: A straightforward phosphorimetric method, Critical Reviews in Analytical Chemistry, 35, p 3-14, 2005.
83. Ribani, M., Grespan, C., Costa, L., Validação em métodos cromatográficos e eletroforéticos, Química Nova, 27, p 771-780, 2004.
84. DOQ-CGCRE-008, Orientações sobre validação de métodos químicos, Instituto Nacional de Metrologia (INMETRO), 2003.
85. Queenie, S., Zucchini, R., Qualidade de medições em química analítica. Estudo de caso: Determinação de cádmio por espectrofotometria de absorção atômica com chama, Química Nova, 24, p 374-380, 2001.
86. Pimentel, M., Barros, B., Calibração: Uma revisão para químicos analíticos, Química Nova, 19, p 268-277, 1996.
87. Barros, B., Pimentel, M., Araújo, M., Recomendações para calibração em química analítica - parte I. Fundamentos e calibração com um componente (calibração univariada), Química Nova, 25, p 856-865, 2002.
88. Anderson, L., Practical statistics for analytical chemist, Van Nostrand Reunhold: New York, 1987.