Laboratoire Cobra Chimie organique et analytique

Dr Julien Vieillard

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PROFESSIONNAL EXPERIENCES

2025-	Professor of Rouen Normandy University, France, CARMeN institute, CNRS UMR 6064
2007-2025	Assistant Professor, Rouen Normandy University, France. COBRA laboratory, CNRS UMR 6014
2006-2007	Postdoctoral Associate; LASOC laboratory; Advisor: Prof. Desbène, Normandy University, France.
2005-2006	Postdoctoral Associate; LEOM laboratory; Advisor: Dr. Krawczyk, Engineering school Ecole centrale de Lyon, France

EDUCATION

2003-2006	Ph.D. microelectronic, Engineering school Ecole centrale de Lyon, France.
2002-2003	M.S. pharmacology, Nice Sofia Antipolis University, France.

ADMINISTRATIVE & INSTITUTIONAL RESPONSIBILITIES

2018--	Director of the packaging department – IUT Evreux, University of Rouen.
2011-	Member of the Advisor Commission of faculty specialists (CCSE, section 32) – University of Rouen, France.

RESEARCH INTERESTS

Surface modification, analytical chemistry, biosensors, adsorption

SCIENTIFIC ACHIEVEMENTS

Academic record (h-index: 30)

84 publications in peer reviewed journal, 6 publications in popularizing paper, 26 oral communications in international conferences.

PUBLICATIONS

1. Synthesis of an original Bi12CoO20/ZnO Nanocomposites for lead adsorption, Materials Science & Engineering B 319 (2025) 118345.

2. T. Matamela, A. Pholosi, V.E. Pakade, J. Veillard, « Efficacy of APTES-Modified hydrochar from macadamia nutshells for chromium remediation from Wastewater.» MRS advances, (2025) sous presse.

3. T. Bouzid, Aicha Naboulsi, Abdelali Grich, Hicham Yazid, Julien Vieillard, Abdelmajid Regti, Mamoune El Himri, Mohammadine El Haddad, « Competitive adsorption of two phenolic pollutants compounds using a novel biosorbent : Analyticals, statistical and theoretical studies.» Microchemical journal 208 (2025) 112281. 10.1016/j.microc.2024.112281

4. P. Nkuigue Fotsing, J. Vieillard, N. Bouazizi, B. Samir, J. Cosme, V. Marquis, F. Le Derf, P. Tsopbou Ngueagni, V. Pakade, E. Djoufac Woumfo, G. L. Dotto, G. Simões dos Reis, M. Rizwan Khan, S. Manoharadas. « Adsorption of Cr(VI) and PO_4^{3-} by amino-functionalized palm oil fibers», Environmental Science and Pollution Research 50 (2024) 60247-60259.10.1007/s11356-024-35242-1(2024). (IF = 5.8)

5. Albert Mandjewil, P.T. Ngueagni, P.N. Fotsing, J. Vieillard, N.M. Fadimatou, O.A. Oyewo, S.S. Makgato, D.C. Onwudiwe, A. Mawire, E.D. Woumfo, « Facile preparation of cross-linked moringa oleifera seed hulls powder/hydroxyapatite framework composite for efficient removal of Toluidine Blue and Methyl violet 2B from aqueous solution». Journal of Inorganic and Organometallic Polymers and Materials (2024) .https://doi.org/10.1007/s10904-024-03440-6 (IF = 3.9)

6. J. Vievard, A. Alem, A. Pantet, N.-D. Ahfir, C. Devouge-Boyer, L. Abdelouahed, J. Vieillard, T. Imhoff, L. Martes Hernández, M. Mignot, « Non-competitive adsorption of polycyclic aromatic hydrocarbons and heavy metals on activated carbon produced from flax shives.» Emergent materials (2024). https://doi.org/10.1007/s42247-024-00806-x

7. B. Samir, N. Bouazizi, P.N. Fotsing, J. Cosme, V. Marquis, G.L. Dotto, F. Le Derf, V. Pakade & J. Vieillard, « Amine modification over activated carbon for an effective removal of phosphate ions in water». Emergent materials (2024) https://doi.org/10.1007/s42247-024-00734-w

8. A. Chougui, J.Vieillard, S. Bouabbaci, B. Asli, K. Zaiter, A. Belouatek, « Treatment of landfill leachate using kaolin-alumina membranes: a focus on performance evaluation. », Emergent materials (2024). https://doi.org/10.1007/s42247-024-00698-x (IF = 3.8)

9. F. Ngoungoure Mandou, P. Nkuigue Fotsing, A. Mandjewil, J. Mermoz Siewe, J. Vieillard, G. L. Dotto, E. Djoufac Woumfo, P. Tsopbou Ngueagni, « Cetyltrimethylammonium bromide (CTAB) functionalization of sodium silicate from rice husks ash for Naphtol Green B and Congo Red adsorption. », emergent materials (2024) https://doi.org/10.1007/s42247-024-00655-8 (IF = 3.8)

10. S. Bakhta, Z. Sadaoui, N. Bouazizi, B. Samir, J. Cosme, O. Allalou, F. Le Derf, J. Vieillard, « Successful removal of fluoride from aqueous environment using Al(OH)3@AC: column studies and breakthrough curve modeling.», RSC advances 14 (2024) 1-14. 10.1039/D3RA06697E (IF = 4,0)

11. D.L. Rossatto, R. de Lima, M.S. Netto J. Vieillard, L.F.O. Silva, D. Pinto, M. Badawi, « Transforming a volcanic rock powder waste into an efficient adsorbent to remove dyes (Acid Green 16 and Acid Red 97) and metals (Ag^{+}, Co^{2+} and Cu^{2+}) from water », Environmental Science and Pollution Research 30 (2023) 124041–124052. 10.1007/s11356-023-31074-7. (IF = 5,8)

12. A. Mandjewil, P. Tsopbou Ngueagni, J. Mermoz Siewe, N.M. Fadimatou, J. Vieillard, G.L. Dotto, P. Nkuigue Fotsing, E. Djoufac Woumfo, « Correlation between cocoa shell modifications by CTAB and its dye adsorption properties », Environmental Science and Pollution Research 30 (2023) 94474–94484. 10.1007/s11356-023-28671-x (IF = 5,8)

13. G.S. dos Reis, G.L. Dotto, J. Vieillard, M.L.S. Oliveira, S.F. Lütke, L.F.O. Silva, É.C. Lima, N.P.G. Salau, U. Lassi, "Uptake the rare earth elements Nd, Ce, and La by a commercial diatomite: kinetics, equilibrium, thermodynamic and adsorption mechanism », Journal of Molecular Liquids 389 (2023) 122862. 10.1016/j.molliq.2023.122862 (IF = 6,6)

14. B. Samir, N. Bouazizi, P. Nkuigue Fotsing, J. Cosme, V. Marquis, G.L. Dotto, F. Le Derf, J. Vieillard, « Preparation and Modification of Activated Carbon for the Removal of Pharmaceutical Compounds via Adsorption and Photodegradation Processes: A Comparative Study », Applied Sciences 13 (2023) 8074, 10.3390/app13148074 (IF = 2,7)

15. C. Yanan, J. Ali, L. Sellaoui, F. Dhaoudi, D.S.P. Franco, J. Georgina, A. Erto, J. Vieillard; M. Badawi, « Elucidating the adsorption mechanism of herbicide Diuron onto activated carbons via steric, energetic and thermodynamic investigations », Journal of Water Process Engineering 53 (2023) 103910. 10.1016/j.jwpe.2023.103910 (IF = 7,3)

16. F. Dhaouadi, G.L. Dotto, J. Vieillard, D. Pinto, L.F.O. Silva, É.C. Lima, Mu. Naushad, F. Aouainig, A. Bonilla-Petriciolet, A. Ben Lamine, « Adsorption of rare earth elements onto diatomite M45: Experimental investigations and modeling with statistical physics theory », journal of rare earths elements 41 (2023) 1805-1811 10.1016/j.jre.2023.05.015. (IF = 4,6)

17. R.F. Pinheiro, A. Grimm, M.L.S. Oliveira, J. Vieillard, L.F.O. Silva, I.A.S. De Brum, É.C. Lima, Mu. Naushad, L. Sellaoui, G.L. Dotto, G.S. dos Reis, « Adsorptive behavior of the rare earth elements Ce and La on a soybean pod derived activated carbon: application in synthetic solutions, real leachate and mechanistic insights by statistical physics modeling », Chemical Engineering Journal 471 (2023) 144484. 10.1016/j.cej.2023.144484 (IF = 15,1)

18. J. Vieillard, N. Bouazizi, P. Nkuigue Fotsing, B. Samir, K. Raguillet, J. Cosme, C. Abou Serhal, M. Mignot, M.S. Bette, P. Auger, G.L. Dotto, F. Le Derf, « Herbs carbonization and activation for fast sorption of nitrate ions: a new challenge for a full treatment of groundwater pollution », Environmental Science and Pollution Research 30 (2023) 82637–82646, 10.1007/s11356-023-28282-6. (IF = 5,8)

19. G.S. dos Reis, G.L. Dotto, J. Vieillard, M.L.S. Oliveira, S.F. Lütke, A. Grimm, L.F.O. Silva, É.C. Lima, M. Naushad, U. Lassi, « Nickel-Aluminium layered double hydroxide as an efficient adsorbent to selectively recover praseodymium and samarium from phosphogypsum leachate », Journal of Alloys and Compounds 960 (2023) 170530, 10.1016/j.jallcom.2023.170530. (IF = 6,4)

20. G.S. dos Reis, C.E. Schnorr, G.L. Dotto, J. Vieillard, M.S. Netto, L.F. O. Silva, I.A. S. De Brum, M. Thyrel, É.C. Lima, U. Lassi, « Wood waste-based functionalized natural hydrochar for the effective removal of Ce(III) ions from aqueous solution», Environmental Science and Pollution Research 30 (2023) 64067-64077, 10.1007/s11356-023-26921-6 (IF = 5,8)

21. A. Belhaj Rhouma, C. Campagne, N.M.Behary, S. François, C. Lanceron, J. Vieillard, Multifunctionalization and Increased Lifespan of a Worsted Wool Fabric », Coatings 13 (2023) 736 10.3390/coatings13040736 (IF = 3,2)

22. G.L. Dotto, J. Vieillard, D. Pinto, S.F. Lütke, L.F.O. Silva, G.S. dos Reis, É.C. Lima, D.S.P. Franco, « Selective adsorption of gadolinium from real leachate using a natural bentonite clay », Journal of Environmental Chemical Engineering 11 (2023) 109748 10.1016/j.jece.2023.109748 (IF = 7,7)

23. C. Gadroy, R. Boukraa, N. Battaglini, F. Le Derf, N. Mofaddel, J.Vieillard, B. Piro, « An Electrolyte-Gated Graphene Field-Effect Transistor for Detection of Gadolinium(III) in Aqueous Media », Biosensors 13 (2023) 363 10.3390/bios13030363 (IF = 5,4)

24. V.X. Nascimento, C. Schnorr, S.F. Lütke, M.C.F. Da Silva, F.M. Machado, P.S. Thue, P.S., E.C. Lima, J. Vieillard, L.F.O. Silva, G.L. Dotto, "Adsorptive Features of Magnetic Activated Carbons Prepared by a One-Step Process towards Brilliant Blue Dye », Molecules 28 (2023) 1821, 10.3390/molecules28041821 (IF = 4,9)

25. H. Tansaoui, N. Bouazizi, N. Behary, C. Campagne, A. El-Achari, J. Vieillard, « Assessing Alternative Pre-Treatment Methods to Promote Essential Oil Fixation into Cotton and Polyethylene Terephthalate Fiber: A Comparative Study », Polymers 15 (2023) 1362. 10.3390/polym15061362. (IF = 5,0)

26. M.T. Nazari, C.Schnorr, C.V.T. Rigueto, I. Alessandretti, F. Melara, N.F. da Silva; L. Crestani; V. Ferrari; J. Vieillard; G.L. Dotto; L.F.O. Silva; J.S. Piccin, « A review of the main methods for composite adsorbents characterization », Environmental Science and Pollution Research 29 (2022) 88488–88506, 10.1007/s11356-022-23883-z (IF = 5,8)

27. Y. Vieira, J.P. Silveira, G.L. Dotto, S. Knani, J. Vieillard, J. Georgin, D.S.P. Franco, « Mechanistic insights and steric interpretations through statistical physics modelling and density functional theory calculations for the adsorption of the pesticides atrazine and diuron by Hovenia dulcis biochar », Journal of Molecular Liquids 367 Part A (2022), 120418. 10.1016/j.molliq.2022.120418 (IF = 6,6)

28. M.C.F. da Silva; C.Schnorr; S.Lütke; S.Knani; V.X. Nascimento; É.C. Lima; J. Vieillard; L.F.O. Silva, G.L. Dotto, « KOH activated carbons from Brazil nut shell: preparation, characterization, and their application in phenol adsorption. », Chemical Engineering Research and Design (2022) 387-396, https://doi.org/10.1016/j.cherd.2022.09.012 (IF = 3,9)

29. J. Vieillard, F. Le Derf, C. Gadroy, B. Samir, « Modification and Uses of Synthetic and Biobased Polymeric Materials", 195-209, Book chapter of "Aryl Diazonium Salts and Related Compounds. », Springer (2022). ISBN: 978-3-031-04398-7. 10.1007/978-3-031-04398-7_10

30. N. Bouazizi, J. Vieillard, B. Samir, F. Le Derf, Advances in Amine-Surface Functionalization of Inorganic-Adsorbents for Water Treatments and Antimicrobial activities: A review. », Polymers, 14 (2022) 378, 10.3390/polym14030378 (IF = 4,4)

31. S. Bakhta, Z. Sadaoui, N. Bouazizi, B. Samir, O. Allalou, C. Devouge Boyer, M. Mignot, J. Vieillard, « Functional activated carbon: from synthesis to groundwater fluoride removal. », RSC advances, 12 (2022) 2332-2348. 10.1039/D1RA08209D (IF = 3,2)

32. M. Louis, T. Clamens, A. Tahrioui, F. Desriac, S. Rodrigues, T. Rosay, N. Harmer, S. Diaz, P.-J. Racine, E. Kipnis, T. Grandjean, J. Vieillard, E. Bouffartigues, P. Cornelis, S. Chevalier, M.G.J. Feuilloley, O. Lesouhaitier, « Pseudomonas aeruginosa Biofilm Dispersion by the Human Atrial Natriuretic Peptide », Advanced Science (2022) 10.1002/advs.202103262 (IF = 15,4)

33. B. Samir, S. Bakhta, N. Bouazizi, Z. Sadaoui, O. Allalou, F. Le Derf, J. Vieillard, « TBO degradation by heterogeneous Fenton-like reaction using Fe supported over activated carbon », Catalysts 11 (2021) 1456, 10.3390/catal11121456 (IF = 4,1)

34. S. Ferhi, J. Vieillard, C. Garau, O. Poultier, L. Demey, R. Beaulieu, P. Penalva, V. Gobert, F. Portet-Koltalo, « Pilot-scale direct UV-C photodegradation of pesticides in groundwater and recycled wastewater for agricultural use », Journal of Environmental Chemical Engineering 9 (2021) 106120, 10.1016/j.jece.2021.106120 (IF = 5,9)

35. A. Abed, Z. Samouh, C. Cochrane, F. Boussu, O. Cherkaoui, R. El Moznine, J. Vieillard, « Piezo-Resistive Properties of Bio-Based Sensor Yarn Made with Sisal Fibre », Sensors 21 (2021) 4083-4098 10.3390/s21124083 (IF = 3,6)

36. N. Krifa, R. Zouari, W. Miled, N. Behary, J. Vieillard, M. Cheikhrouhou, C. Campagne, « Atmospheric plasma technique assessment for the development of a polyfunctional end-use polyester fabric », Fibers and polymers 22 (2021) 2782–2791. 10.1007/s12221-021-0847-7 (IF = 2,1)

37. P. Nkuigue Fotsing, N. Bouazizi, E. Djoufac Woumfo, N. Mofaddel, F. Le Derf, J. Vieillard, « Investigation of chromate and nitrate removal by adsorption at the surface of an amine-modified cocoa shell adsorbent », Journal of Environmental Chemical Engineering 9 (2021) 104618. 10.1016/j.jece.2020.104618 (IF = 5,9)

38. S. Bekri, F. Desriac, M. Barreau, T. Clamens, T. Gallavardin, P. Le Nahenec-Martel, J. Vieillard, Y. Datoussaid, N. Choukchou-Braham, O. Lesouhaitier, X. Franck, S. Leleu, « New antibacterial cadiolide analogues active against antibiotic-resistant strains », Bioorganic & Medicinal Chemistry Letters 30 (2020) 127580 10.1016/j.bmcl.2020.127580 (IF = 2,8)

39. L. Cibien, M. Parot, P. Nkuigue Fotsing, P. Gaveau, E. Djoufac Woumfo, J. Vieillard, A. Napoli, N. Brun, « Ionothermal Carbonization in [Bmim][FeCl4]: an Opportunity for the Valorization of Raw Lignocellulosic Agrowastes into Advanced Porous Carbons », Green Chemistry 22 (2020) 5423-5436 https://doi.org/10.1039/D0GC01510E (IF = 10,2)

40. R. Ouargli Saker, N. Bouazizi, S. Lassouad, S. Ammar, J. Vieillard, F. Le Derf, A. Azzouz, « Copper-loaded SBA-15 silica with improved electron mobility - Conductance and capacitance properties », Journal of Inorganic and Organometallic Polymers and Materials 30 (2020) 5108–5117 10.1007/s10904-020-01642-2 (IF = 3,1)

41. S. Bakhta, Z. Sadaoui, U. Lassi, H. Romar, R. Kupila, J. Vieillard, « Performances of metals modified activated carbons for fluoride removal from aqueous solutions », Chemical Physics Letters 754 (2020) 137705. 10.1016/j.cplett.2020.137705 (IF = 2,3)

42. P. Nkuigue Fotsing, E. Djoufac Woumfo, N. Mofaddel, F. Le Derf, J. Vieillard, « Surface modification of biomaterials based on cocoa shell with improved nitrate and Cr(VI) removal », RSC Advances 10 (2020) 20009-20019 10.1039/D0RA03027A (IF = 4,0)

43. M. Neaz Morshed, N. Behary, N. Bouazizi, J. Vieillard, J. Guan, F. Le Derf and V. Nierstrasz, « Modification of fibrous membrane for organic and pathogenic contaminants removal: From design to application », RSC Advances 10 (2020) 13155–13173 10.1039/D0RA01362E (IF = 4,0)

44. D.S.P. Franco, J. Vieillard, N. Paula G. Salau, G. Luiz Dotto, « Interpretations on the mechanism of In(III) adsorption onto chitosan and chitin: a mass transfer model approach », Journal of molecular liquid 304 (2020) 112758 10.1016/j.molliq.2020.112758 (IF = 4,6)

45. N. Bouazizi, Ah. Abed, S. Giraud, A. El Achari, C. Campagne, M. Neaz Morshed, O. Thoumire, R. El Moznine, O. Cherkaoui, J. Vieillard, F. Le Derf, « Development of New Composite Fibers with Excellent UV Radiation Protection », Physica E: Low-dimensional Systems and Nanostructures. Physica E 118 (2020) 113905 10.1016/j.physe.2019.113905 (IF = 3,4)

46. P. Tsopbou Ngueagni, E. Djoufac Woumfo, P. Senthil Kumar, M. Siéwé, J. Vieillard, N. Brun, P. Fotsing Nkuigue, « Adsorption of Cu(II) ions by Modified Horn Core: Effect of Temperature on Adsorbent Preparation and Extended Application in River Water », journal of molecular liquids 298 (2020) 112023 10.1016/j.molliq.2019.112023 (IF = 4,6)

47. P. Nkuigue Fotsing, E. Djoufac Woumfo, A. Măicăneanu, J. Vieillard, C. Tcheka, P. Tsopbou Ngueagni, J. Mermoz Siéwé. « Elimination of Cu(II) ions from aqueous solution by a biocomposite material made from cocoa Cortex (Theobroma cacao) and sodium alginate », Environmental Science and Pollution Research, 27 (2020) 8451-8466 10.1007/s11356-019-07206-3 (IF = 2,9)

48. A. Abed, N. Bouazizi, S. Giraud, A. El Achari, C. Campagne, O. Thoumire, R. El Moznine, O. Cherkaoui, J. Vieillard, A. Azzouz « Polyester-supported chitosan-Polyvinylidene fluoride-Metal oxide composites with improved flame retardancy and thermal stability », Chinese journal of Polymer science 38 (2020), 84-91 10.1007/s10118-020-2336-7 (IF = 2,8)

49. H. Soh Ndé, P. Azinwi Tamfuh, G. Clet, J. Vieillard, M. Tsaffo Mbognoua, E. Djoufac Woumfo, « Comparison of HCl and H_2SO_4 for the Acid Activation of a Cameroonian Smectite Soil Clay: Palm Oil Discolouration and Landfill Leachate Treatment », Heliyon 5 (2019) e02926 10.1016/j.heliyon.2019.e02926 (IF = 2,8)

50. C. Soulignac, B. Cornelio , F. Brégier, F. Le Derf, J.F. Brière, T. Clamens, O. Lesouhaitier, F. Estour, J. Vieillard, « Heterogeneous-phase Sonogashira cross-coupling reaction on COC surface for the grafting of biomolecules – application to isatin », Colloid and surface B 181 (2019) 639-647. 10.1016/j.colsurfb.2019.06.001 (IF = 5,2)

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52. M.N. Morshed, N. Bouazizi, N. Behary, J. Vieillard, O. Thoumire, V. Nierstrasz, A. Azzouz, « Iron-loaded amine/thiol functionalized polyester fibers with high catalytic activities: Comparative study », Dalton Transaction 48 (2019) 8384-8399. 10.1039/C9DT00937J (IF = 4,0)

53. J. Vieillard, N. Bouazizi, M. N. Morshed, T. Clamens, F. Desriac, R. Bargougui, P. Thebault, O. Lesouhaitier, F. Le Derf, A. Azzouz, « CuO Nanosheets Modified with Amine and Thiol rafting for High Catalytic and Antibacterial Activities », Industrial & Engineering Chemistry Research 58 (2019) 10179-10189. 10.1021/acs.iecr.9b00609 (IF = 3,7)

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55. N. Bouazizi, A. El-Achari, C. Campagne, J. Vieillard, A. Azzouz, « Inorganic-Organic-Fabrics based Polyester/Cotton for Catalytic Reduction of 4-Nitrophenol », Journal of Molecular Structure 1180 (2019) 1-9 10.1016/j.molstruc.2018.11.097 (IF = 3,2)

56. N. Bouazizi, A. El-Achari, N. Behary, C. Campagne, J. Vieillard, O. Thoumire, A. Azzouz, « Development of new multifunctional fiber based nonwovens for organic pollutants reduction and detoxification :high catalytic and antibacterial activities », Chemical Engineering Journal 356 (2019) 702-716 10.1016/j.cej.2018.08.166 (IF = 6,2)

57. N. Bouazizi, J. Vieillard, R. Bargougui, N. Couvrat, O. Thoumire, S. Morin, G. Ladam, N. Mofaddel, N. Brun, A. Azzouz, F. Le Derf, « Entrapment and Stability of Iron Nanoparticles within APTES modified Graphene Oxide Sheets with Improved Catalytic Activity », Journal of Alloys and Compounds 771 (2019) 1090-1102. 10.1016/j.jallcom.2018.08.240 (IF = 5,3)

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Core-Shell as Efficient Matrices for CO_2 Adsorption: Synthesis, Properties and Kinetic Studies », Journal of the Taiwan Institute of Chemical Engineer, 95 (2019) 452-465 10.1016/j.jtice.2018.08.020 (IF = 3,8)

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60. N. Bouazizi, A. El Achari, C. Campagne, J. Vieillard, A. Azzouz, « Polyfunctional cotton fabrics with catalytic activity and antibacterial capacity », Chemical Engineering Journal 351 (2018) 328-339 10.1016/j.cej.2018.06.050 (IF = 6,2)
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62. N. Bouazizi, A. El-achari, C. Campagne, J. Vieillard, A. Azzouz, « Copper oxide coated polyester fabrics with enhanced catalytic properties towards the reduction of 4-nitrophenol », Journal of Materials Science: Materials in Electronics, 29 (2018) 10802-10813 10.1007/s10854-018-9145-6 (IF = 2,5)
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