

Сведения, характеризующие научную ценность научных трудов, представленных для премии, присуждаемой Санкт-Петербургский государственным университетом за научные труды, в категории за вклад в науку молодых ученых.

Название цикла работ: «Реакционно-массообменные процессы и совмещенные равновесия в системах, образованных компонентами биотоплива: термодинамическое исследование и топология фазовых диаграмм»

1. Maria Toikka, Alexey Sadaev, Artemiy Samarov. Liquid-liquid equilibria, solubility and critical states in the system propionic acid – n-butanol – n-butyl propionate – water at 293.15 K and atmospheric pressure, *Journal of Chemical Thermodynamics*, Available online 17 September 2019.
DOI: 10.1016/j.jct.2019.105957
Количество цитирований: 0 (WOS), 1 (Scopus)
Impact factor(2019): **2.888**. Impact factor(5 лет):**2.500**.
SJR: **0.864**. SNIP: **1.270**.
JCR: (Q1) SJR: (Q2)
2. Maya Trofimova, Alexey Sadaev, Artemiy Samarov, Alexandra Golikova, Nikita Tsvetov, Maria Toikka, Alexander Toikka. Liquid-liquid equilibrium of acetic acid – ethanol – ethyl acetate – water quaternary system: Data review and new results at 323.15 K and 333.15 K, *Fluid Phase Equilibria*. Vol. 503, 2020 (on-line 14 September 2019).
DOI: 10.1016/j.fluid.2019.112321
Количество цитирований: 0 (WOS), 3 (Scopus)
Impact factor(2019): **2.838**. Impact factor(5 лет):**2.454**.
SJR: **0.762**. SNIP: **1.201**.
JCR: (Q2) SJR: (Q1)
3. Alexandra Golikova, Nikita Tsvetov, Artemiy Samarov, Maria Toikka, Irina Zvereva, Maya Trofimova, Alexander Toikka. Excess enthalpies and heat of esterification reaction in ethanol + acetic acid + ethyl acetate + water system at 313.15 K, *Journal of Thermal Analysis and Calorimetry*, Vol. 139, I. 2, P. 1301-1307, 2020 (on-line 20 June 2019)
DOI: 10.1007/s10973-019-08488-y
Количество цитирований: 0 (WOS), 0 (Scopus)
Impact factor(2019): **2.731**. Impact factor(5 лет):**2.325**.
SJR: **0.415**. SNIP: **1.078**.
JCR: (Q2) SJR: (Q3)

4. М.А. Тойкка, А.А. Самаров, А.А. Садаева, А.А. Сенина, О.Л. Лобачева. Химическое равновесие в системе пропионовая кислота – этиловый спирт – этилпропионат – вода и экстракционные процессы с участием глубоких эвтектических растворителей // Тонкие химические технологии. Том 14 № 1. 2019. С. 47-58.
DOI: 10.32362/2410-6593-2019-14-1-47-58
Количество цитирований: 1 (WOS)
Impact factor РИНЦ (2019): **0.25**
5. Alexander Smirnov, Anna Sadaeva, Kristina Podryadova, Maria Toikka. Quaternary liquid-liquid equilibrium, solubility and critical states: Acetic acid - n-butanol - n-butyl acetate - water at 318.15 K and atmospheric pressure, Fluid Phase Equilibria. Vol. 493, P. 102-108, 2019
DOI: 10.1016/j.fluid.2019.04.020
Количество цитирований: 3 (WOS), 5 (Scopus)
Impact factor(2019): **2.731**. Impact factor(5 лет):**2.325**.
SJR: **0.415**. SNIP: **1.078**.
JCR: **(Q2)** SJR: **(Q1)**
6. Toikka M., Sadaeva A., Samarov A., Toikka A. Solubility and critical surface in the system propionic acid–ethanol–ethyl propionate–water at 293.15, 303.15 and 313.15 K, Journal of Chemical Thermodynamics. Vol. 132. P. 113-121. May 2019
DOI: 10.1016/j.jct.2018.12.026
Количество цитирований: 3 (WOS), 6 (Scopus)
Impact factor(2019): **2.888**. Impact factor(5 лет):**2.500**.
SJR: **0.864**. SNIP: **1.270**.
JCR: **(Q1)** SJR: **(Q2)**
7. Maya Trofimova, Alexey Sadaev, Artemiy Samarov, Maria Toikka, Alexander Toikka. Solubility, liquid-liquid equilibrium and critical states for the quaternary system formic acid – ethanol – ethyl formate – water at 298.15 K and 308.15 K, Fluid Phase Equilibria. Vol. 485, P. 111-119. April 2019
DOI: 10.1016/j.fluid.2018.12.024
Количество цитирований: 6 (WOS), 8 (Scopus)
Impact factor(2019): **2.731**. Impact factor(5 лет):**2.325**.
SJR: **0.415**. SNIP: **1.078**.
JCR: **(Q2)** SJR: **(Q1)**

8. Haarmann, N., Siewert, R., Samarov, A.A., Verevkin, S.P., Held, C., Sadowski, G. Thermodynamic Properties of Systems Comprising Esters: Experimental Data and Modeling with PC-SAFT and SAFT- γ Mie, Industrial and Engineering Chemistry Research, VOL. 58(16) P.6841-6849. 2019
DOI: 10.1021/acs.iecr.9b00714
Количество цитирований: 1 (WOS), 1 (Scopus)
Impact factor(2019): **3.573**. Impact factor(5 лет): **3.684**.
SJR: **0.899**. SNIP: **1.124**.
JCR: **(Q2)**
9. Samarov, A., Shner, N., Mozheeva, E., Toikka, A. Liquid-liquid equilibrium of alcohol-ester systems with deep eutectic solvent on the base of choline chloride. Journal of Chemical Thermodynamics. Vol. 131, P. 369-374. 2019
DOI: 10.1016/j.jct.2018.11.019
Количество цитирований: 9 (WOS), 8 (Scopus)
Impact factor(2019): **2.888**. Impact factor(5 лет): **2.500**.
SJR: **0.864**. SNIP: **1.270**.
JCR: **(Q1)** SJR: **(Q2)**
10. Prikhod'ko, I.V., Samarov, A.A., Toikka, A.M. On Application of PC-SAFT Model for Estimating the Speed of Sound in Synthetic and Natural Oil-and-Gas Mixtures. Russian Journal of Applied Chemistry. Vol. 92(2), P. 262-266. 2019
DOI: 10.1134/S1070427219020149
Количество цитирований: 0 (WOS), 0 (Scopus)
Impact factor(2019): **0.69**. Impact factor(5 лет): **0.608**.
SJR: **0.228**. SNIP: **0.502**.
JCR: **(Q4)** SJR: **(Q3)**
11. Toikka, A.M., Samarov, A.A., Farzaneh-Gord, M., Zvereva, I.A. On Calculation of Some Properties of Natural Gas Using a Limited Number of Experimental Parameters. Theoretical Foundations of Chemical Engineering. Vol. 53(1) P. 21-28. 2019
DOI: 10.1134/S0040579519010159
Количество цитирований: 0 (WOS), 0 (Scopus)
Impact factor(2019): **0.557**. Impact factor(5 лет): **0.623**.
SJR: **0.328**. SNIP: **0.909**.
JCR: **(Q4)** SJR: **(Q2)**
12. Samarov A. A., Smirnov, M. A., Sokolova, M. P., Toikka A. M. Liquid-Liquid Equilibrium Data for the System N-Octane plus Toluene + DES at 293.15 and 313.15 K and Atmospheric Pressure, Theoretical Foundations of Chemical Engineering, Vol. 52, P. 258-263, 2018

DOI: 10.1134/S0040579518020148

Количество цитирований: 6 (WOS), 6 (Scopus)

Impact factor(2019): **0.557**. Impact factor(5 лет): **0.623**.

SJR: **0.328**. SNIP: **0.909**.

JCR: **(Q4)** SJR: **(Q2)**

13. Toikka M. A, Trofimova D. V., Samarov A. A. Liquid-liquid equilibrium and critical states for the quaternary system propionic acid-n-butanol-n-butyl propionate-water at 303.15 K, Fluid Phase Equilibria, Vol. 460, P. 17-22, 2018

DOI: 10.1016/j.fluid.2017.12.023

Количество цитирований: 9 (WOS), 12 (Scopus)

Impact factor(2019): **2.731**. Impact factor(5 лет): **2.325**.

SJR: **0.415**. SNIP: **1.078**.

JCR: **(Q2)** SJR: **(Q1)**

14. Samarov A.A., Smirnov M.A., Toikka A.M., Prildiodko I.V. Study of Deep Eutectic Solvent on the Base Choline Chloride as Entrainer for the Separation Alcohol-Ester Systems, Journal of Chemical and Engineering Data, Vol. 63, P. 1877-1884, 2018

DOI: 10.1021/acs.jced.7b00912

Количество цитирований: 6 (WOS), 5 (Scopus)

Impact factor(2019): **2.369**. Impact factor(5 лет): **2.503**.

SJR: **0.657**. SNIP: **1.102**.

JCR: **(Q2)**

15. Ivan A. Rodionov, Elizaveta V. Mechtaeva, Alena A. Burovikhina, Oleg I. Silyukov, Maria A. Toikka, Irina A. Zvereva. Effect of protonation on the photocatalytic activity of the K₂La₂Ti₃O₁₀ layered oxide in the reaction of hydrogen production, Monatshefte für Chemie 149 (2018) P. 475–482.

DOI:10.1007/s00706-017-2105-7

Количество цитирований: 10 (WOS), 11 (Scopus)

Impact factor(2019): **1.349**. Impact factor(5 лет): **1.194**.

SJR: **0.312**. SNIP: **0.494**.

JCR: **(Q3)**

16. Toikka M.A, Vernadskaya V. A, Samarov A.A. Solubility, liquid-liquid equilibrium and critical states for quaternary system acetic acid - n-amyl alcohol - n-amyl acetate - water at 303.15 K and atmospheric pressure, Fluid Phase Equilibria, Vol. 471, P. 68-73, 2018

DOI: 10.1016/j.fluid.2018.05.009

Количество цитирований: 5 (WOS), 7 (Scopus)

Impact factor(2019): **2.731**. Impact factor(5 лет): **2.325**.

SJR: **0.415**. SNIP: **1.078**.

JCR: (Q2) SJR: (Q1)

17. Sokolova M.P. , Smirnov M.A. , Samarov A.A. , Bobrova N.V. , Vorobiov V.K. , Popova E.N., Filippova E. , Geydt P. , Lahderanta E. , Toikka A.M. Plasticizing of chitosan films with deep eutectic mixture of malonic acid and choline chloride, Carbohydrate Polymers, Vol. 197, P. 548-557, 2018

DOI: 10.1016/j.carbpol.2018.06.037

Количество цитирований: 11 (WOS), 12 (Scopus)

Impact factor(2019): **7.182**. Impact factor(5 лет): **6.89**.

SJR: **1.514**. SNIP: **1.946**.

JCR: (Q1) SJR: (Q1)

18. Alexandra Golikova, Nikita Tsvetov, Anufrikov Yuri, Maria Toikka, Zvereva Irina, Alexander Toikka. Excess enthalpies of the reactive system ethanol + acetic acid + ethyl acetate + water for chemically equilibrium states at 313.15 K, Journal of Thermal Analysis and Calorimetry, 2018, Vol. 134, I. 1, P. 835 – 841,

DOI: 10.1007/s10973-018-7010-8

Количество цитирований: 2 (WOS), 2 (Scopus)

Impact factor(2019): **2.731**. Impact factor(5 лет): **2.325**.

SJR: **0.415**. SNIP: **1.078**.

JCR: (Q2) SJR: (Q3)

19. Alexander V. Fonin, Alexandra D. Golikova, Irina A. Zvereva, Sabato D'Auria, Maria Staiano, Vladimir N. Uversky, Irina M. Kuznetsova, Konstantin K. Turoverov. Osmolyte-Like Stabilizing Effects of Low GdnHCl Concentrations on d-Glucose/d-Galactose-Binding Protein, International Journal of Molecular Sciences, 2017., Vol. 18, I. 9, P. 2008 – 2028,

DOI: 10.3390/ijms18092008

Количество цитирований: 1 (WOS), 1 (Scopus)

Impact factor(2019): **4.556**. Impact factor(5 лет): **4.653**.

SJR: **1.317**. SNIP: **1.300**.

JCR: (Q2) SJR: (Q1)

20. Maria Toikka, Anna Sadaeva, Artemiy Samarov, Alexandra Golikova, Maya Trofimova, Nataliya Shcherbakova, Alexander Toikka. Chemical equilibrium for the reactive system propionic acid + ethanol + ethyl propionate + water at 303.15 and 313.15 K, Fluid Phase Equilibria, 2017., Vol. 451, P. 91-95,

doi: 10.1016/j.fluid.2017.08.010

Количество цитирований: 6 (WOS), 7 (Scopus)

Impact factor(2019): **2.731**. Impact factor(5 лет): **2.325**.

SJR: **0.415**. SNIP: **1.078**.

JCR: (Q2) SJR: (Q1)

21. Alexandra Golikova, Artemiy Samarov, Maya Trofimova, Sevastyan Rabdano, Maria Toikka, Oleg Pervukhin, Alexander Toikka. Chemical Equilibrium for the Reacting System Acetic Acid–Ethanol–Ethyl Acetate–Water at 303.15 K, 313.15 K and 323.15 K, *Journal of solution chemistry*, 2017., Vol. 46, P. 374-387,
doi: 10.1007/s10953-017-0583-1
Количество цитирований: 9 (WOS), 8 (Scopus)
Impact factor(2019): **1.273**. Impact factor(5 лет): **1.26**.
SJR: **0.304**. SNIP: **0.689**.
JCR: (Q4) SJR: (Q1)
22. Samarov, A.A., Smirnov, M.A., Sokolova, M.P., Popova, E.N., Toikka, A.M. Choline chloride based deep eutectic solvents as extraction media for separation of n-hexane–ethanol mixture // *Fluid Phase Equilibria*. 2017. V. 448. P. 123-127.
DOI 10.1016/j.fluid.2017.03.029
Количество цитирований: 22 (WOS), 21 (Scopus)
Impact factor(2019): **2.731**. Impact factor(5 лет): **2.325**.
SJR: **0.415**. SNIP: **1.078**.
JCR: (Q2) SJR: (Q1)
23. Samarov A., Toikka M., Trofimova M., Toikka A. Liquid-liquid equilibrium for the quaternary system propionic acid + n-propanol + n-propyl propionate + water at 293.15, 313.15 and 333.15 K // *Fluid Phase Equilibria*. 2016. T. 425. C. 183-187.
DOI 10.1016/j.fluid.2016.05.033
Количество цитирований: 9 (WOS), 9 (Scopus)
Impact factor(2019): **2.731**. Impact factor(5 лет): **2.325**.
SJR: **0.415**. SNIP: **1.078**.
JCR: (Q2) SJR: (Q1)
24. Samarov A.A., Toikka M.A., Naumkin P.V., Toikka, A.M. Chemical equilibrium and liquid-phase splitting in acetic acid + n-propanol + n-propyl acetate + water system at 293.15 and 353.15 K // *Theoretical Foundations of Chemical Engineering*. 2016. T. 50. C. 739-745.
DOI: 10.1134/S0040579516050377
Количество цитирований: 5 (WOS), 5 (Scopus)
Impact factor(2019): **0.557**. Impact factor(5 лет): **0.623**.
SJR: **0.328**. SNIP: **0.909**. (Q4)
JCR: (Q2) SJR: (Q2)
25. Samarov A.A., Naumkin P.V., Toikka M.A., Toikka A.M. Chemical equilibrium and liquid-liquid equilibrium for the system acetic acid - N-butanol - N-butyl acetate – Water // 22nd International Congress of Chemical and Process Engineering, CHISA

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<https://proxy.library.spbu.ru:2090/record/display.uri?eid=2-s2.0-85050745468&origin=resultslist&sort=plf-f&src=s&st1=Chemical+equilibrium+and+liquid-liquid+equilibrium+for+the+system+acetic+acid+-+N-butanol+-+N-butyl+acetate+--+Water+&st2=&sid=06f2b462b82e2ff5e69963f82d7eb4a7&sot=b&sdt=b&sl=132&s=TITLE-ABS-KEY%28Chemical+equilibrium+and+liquid-liquid+equilibrium+for+the+system+acetic+acid+-+N-butanol+-+N-butyl+acetate+--+Water+%29&relpos=0&citeCnt=0&searchTerm=>

26. Artemiy Samarov, Pavel Naumkin, Alexander Toikka. Chemical equilibrium for the reactive system acetic acid + n-butanol + n-butyl acetate + water at 308.15 K // Fluid Phase Equilibria, 2015 Vol. 403, P. 10-13

DOI: 10.1016/j.fluid.2015.06.001

Количество цитирований: 5 (WOS), 6 (Scopus)

Impact factor(2019): **2.731**. Impact factor(5 лет): **2.325**.

SJR: **0.415**. SNIP: **1.078**.

JCR: **(Q2)** SJR: **(Q1)**

27. A.M. Toikka, A.A. Samarov, M.A. Toikka. Phase and chemical equilibria in multicomponent fluid systems with a chemical reaction // Russian Chemical Reviews. 84 (4). 2015. pp. 378-392.

DOI 10.1070/RCR4515

Количество цитирований: 11 (WOS), 13 (Scopus)

Impact factor(2019): **4.75**. Impact factor(5 лет): **4.257**.

SJR: **0.896**. SNIP: **2.143**.

JCR: **(Q2)** SJR: **(Q1)**

28. Artemiy Samarov, Maria Toikka, Alexander Toikka. Liquid–liquid equilibrium and critical states for the system acetic acid + n-butanol + n-butyl acetate + water at 308.15 K // Fluid Phase Equilibria. Volume 385, 2015, pp. 129–133.

DOI:10.1016/j.fluid.2014.11.004

Количество цитирований: 15 (WOS), 17 (Scopus)

Impact factor(2019): **2.731**. Impact factor(5 лет): **2.325**.

SJR: **0.415**. SNIP: **1.078**.

JCR: **(Q2)** SJR: **(Q1)**