Fișa de îndeplinire a standardelor minimale stabilite de CNATDCU conform Monitorul Oficial nr. 890 bis din 27 decembrie 2012

Conf. Dr. Ing. Călin-Cristian Cormoș

I. Număr total de articole în reviste ISI (NT): $NT \ge 25$

Scor realizat de candidat: NT = 48

- 1. C.C. Cormos, Assessment of chemical absorption/adsorption for post-combustion CO₂ capture from Natural Gas Combined Cycle (NGCC) power plants, Applied Thermal Engineering, 82, 2015, 120 128
- 2. A.M. Cormos, C. Dinca, C.C. Cormos, *Multi-fuel multi-product operation of IGCC power plants with carbon capture and storage (CCS)*, Applied Thermal Engineering, 2015, 74, 20 27
- 3. C.C. Cormos, Economic evaluations of coal-based combustion and gasification power plants with post-combustion CO₂ capture using calcium looping cycle, Energy, 2014, 78, 665 673
- 4. M. Muresan, C.C. Cormos, P.S. Agachi, *Biomass gasification-based hydrogen supply chain analysis under demand variability*, Studia UBB Chemia, LIX, 3, 2014, 29 42
- 5. L. Petrescu, C.C. Cormos, Waste reduction (WAR) algorithm applied for environmental impact assessment of coal gasification with carbon capture and storage, Journal of Cleaner Production, 2014, accepted, in press
- 6. S. Fogarasi, C.C. Cormos, *Technico-economic assessment of coal and sawdust co-firing power generation with CO₂ capture*, Journal of Cleaner Production, 2014, accepted, in press
- 7. B. Dorneanu, C.C. Cormos, *Techno-economic evaluation of Calcium Looping cycle for CO*₂ *capture from super-critical power plants*, Studia Universitatis Chemia, LIX, 4, 2014, 205 215
- 8. C.C. Cormos, *Economic implications of pre- and post-combustion calcium looping configurations applied to gasification power plants*, International Journal of Hydrogen Energy, 39, 2014, 10507-10516
- 9. C.C. Cormos, Renewable hydrogen production concepts from bioethanol reforming with carbon capture, International Journal of Hydrogen Energy, 39, 2014, 5597-5606
- 10. M. Muresan, C.C. Cormos, S. Agachi, *Comparative life cycle analysis for gasification-based hydrogen production systems*, Journal of Renewable and Sustainable Energy, 6, 2014, 013131

- 11. A.M. Cormos, C.C. Cormos, *Investigation of hydrogen and power co-generation based on direct coal chemical looping systems*, International Journal of Hydrogen Energy, 39, 2014, 2067-2077
- 12. C.C. Cormos, *Techno-economic and environmental evaluations of large scale gasification-based CCS project in Romania*, International Journal of Hydrogen Energy, 39, 2014, 13-27
- 13. C.C. Cormos, A.M. Cormos, L. Petrescu, Assessment of chemical looping-based conceptual designs for high efficient hydrogen and power co-generation applied to gasification processes, Chemical Engineering Research and Design, 92, 2014, 741-751
- 14. I.M. Bodea, C.C. Cormos, *Applications of chemical looping combustion to energy conversion processes*, Studia Chemia, 4, 2013, 7-22
- 15. C. Dinca, C.C. Cormos, H. Necula, *Environmental impact assessment of GHG emissions generated by coal life cycle and solutions for reducing CO*₂, Journal of Environmental Protection, 4, 2013, 5-15
- 16. F. Goga, R. Dudric, C.C. Cormos, F. Imre, L. Bizo, Radu Misca, *Fly ash from thermal power plant, raw material for glass-ceramic*, Environmental Engineering and Management Journal, 12 (2), 2013, 337-342
- 17. C.C. Cormos, Assessment of flexible energy vectors poly-generation based on coal and biomass/solid wastes co-gasification with carbon capture, International Journal of Hydrogen Energy, 38, 2013, 7855-7866
- 18. C.C. Cormos, C. Dinca, Assessment of mass and energy integration aspects for IGCC power plants with carbon capture and storage (CCS), Studia Universitatis Chemia, LVIII, 1, 2013, 117-131
- 19. M. Muresan, C.C. Cormos, P.S. Agachi, *Techno-economical assessment of coal and biomass gasification-based hydrogen production supply chain system*, Chemical Engineering Research and Design, 91, 2013, 1527-1541
- 20. C.C. Cormos, K. Vatopoulos, E. Tzimas, Assessment of the consumption of water and construction materials in state-of-the-art fossil fuel power generation technologies involving CO₂ capture, Energy, 51, 2013, 37-49
- 21. C.C. Cormos, A.M. Cormos, Assessment of calcium-based chemical looping options for gasification power plants, International Journal of Hydrogen Energy, 38, 2013, 2306-2317
- 22. A. Padurean, C.C. Cormos, P.S. Agachi, *Techno-economic evaluation of pre- and post-combustion carbon dioxide capture methods applied for an IGCC plant for power generation*, Environmental Engineering and Management Journal, 12, 2013, 2191-2202
- 23. I.M. Bodea, C.C. Cormos, *Evaluation of iron and nickel-based oxygen carriers for natural gas chemical looping combustion systems*, Studia Universitatis Chemia, LVII, 2, 2012, 47 57
- 24. C.C. Cormos, Evaluation of syngas-based chemical looping applications for hydrogen and power co-generation with CCS, International Journal of Hydrogen Energy, 37, 2012, 13371-13386

- 25. C.C. Cormos, Integrated assessment of IGCC power generation technology with carbon capture and storage (CCS), Energy, 42, 2012, 434-445
- 26. C.C. Cormos, *Hydrogen and power co-generation based on coal and biomass/solid wastes co-gasification with carbon capture and storage*, International Journal of Hydrogen Energy, 37, 2012, 5637-5648
- 27. A. Padurean, C.C. Cormos, P.S. Agachi, *Pre-combustion carbon dioxide capture* by gas-liquid absorption for Integrated Gasification Combined Cycle power plants, International Journal of Greenhouse Gas Control, 7, 2012, 1-11
- 28. M. Badaluta, C.C. Cormos, P.S. Agachi, Hydrogen *Production through cogasification of coal and biomass with carbon dioxide capture*, Studia Universitatis Chemia, LVII, 1, 2012, 167-174
- 29. F. Starr, C.C. Cormos, *Materials challenges and gasifier choices in IGCC processes for clean and efficient energy conversion*, Materials Research Innovations 15, 2011, 428-446
- 30. V. Goia, C.C. Cormos, P.S. Agachi, *Influence of temperature and heating rate on biomass pyrolysis in a fixed-bed reactor*, Studia Universitatis Babes-Bolyai, Chemia, LVI, 2, 2011, 49 56
- 31. C.C. Cormos, *Hydrogen production from fossil fuels with carbon capture and storage based on chemical looping systems*, International Journal of Hydrogen Energy, 36, 2011, 5960-5971
- 32. C.C. Cormos, Evaluation of power generation schemes based on hydrogen-fuelled combined cycle with carbon capture and storage (CCS), International Journal of Hydrogen Energy, 36, 2011, 3726-3738
- 33. A. Padurean, C.C. Cormos, A.M. Cormos, P.S. Agachi, *Multicriterial analysis of post-combustion carbon dioxide capture using alkanolamines*, International Journal of Greenhouse Gas Control, 5, 2011, 676-685
- 34. C.C. Cormos, Evaluation of energy integration aspects for IGCC-based hydrogen and electricity co-production with carbon capture and storage, International Journal of Hydrogen Energy, 35, 2010, 7485-7497
- 35. A.M. Padurean, C.C. Cormos, A.M. Cormos, S. Agachi, *Technical assessment of CO₂ capture using alkanolamines solutions*, Studia Universitatis Babes-Bolyai, Chemia, LV, 1, 2010, 55 63
- 36. V. Maxim, C.C. Cormos, P.S. Agachi, *Mathematical modeling and simulation of coal co-gasification with waste/biomass in an entrained-flow gasifier*, Studia Universitatis Babes-Bolyai, Chemia, LV, 2, 2010, 51 62
- 37. C.C. Cormos, Evaluation of iron based chemical looping for hydrogen and electricity co-production by gasification process with carbon capture and storage, International Journal of Hydrogen Energy, 35, 2010, 2278 2289
- 38. C.C. Cormos, F. Starr, E. Tzimas, *Use of lower grade coals in IGCC plants with carbon capture for the co-production of hydrogen and electricity*, International Journal of Hydrogen Energy, 35, 2010, 556 567

- 39. C.C. Cormos, Assessment of hydrogen and electricity co-production schemes based on gasification process with carbon capture and storage, International Journal of Hydrogen Energy, 34, 2009, 6065 6077
- 40. C.C. Cormos, S. Agachi, *Gasification process A practical way for solid fossil fuels decarbonisation*, Studia Universitatis Babes-Bolyai, Chemia, LIV, 1, 2009, 81 91
- 41. C.C. Cormos, A.M. Cormos, S. Agachi, *Power generation from coal and biomass based on IGCC concept with pre and post-combustion carbon capture methods*, Asia Pacific Journal of Chemical Engineering, 4, 2009, 870 877
- 42. C.C. Cormos, F. Starr, E. Tzimas, S. Peteves, *Innovative concepts for hydrogen production processes based on coal gasification with CO₂ capture*, International Journal of Hydrogen Energy, 2008, Volume 33, Issue 4, 1286 1294
- 43. C.C. Cormos, F. Starr, E. Tzimas, S. Peteves, *Compressor issues for hydrogen production and transmission through a long distance pipeline network*, Revista de Chimie, 59(4), 2008, 443 447
- 44. S. Bandyopadhyay, C.C. Cormos, *Water Management in Process Industries Incorporating Regeneration and Recycle through a Single Treatment Unit*, Industrial and Engineering Chemistry Research, 2008, 47(4), 1111 1119
- 45. E. Tzimas, A. Mercier, C.C. Cormos, S. Peteves, *Trade-off in emissions of acid gas pollutants and of carbon dioxide in fossil fuels power plants with carbon capture*, Energy Policy, 35, 2007, 3991 3998
- 46. C.C. Cormos, A.M. Cormos, S. Agachi, Modelarea şi simularea procesului de carbonatare a saramurii amoniacale din cadrul tehnologiei de obținere a sodei calcinate, Revista de Chimie, 57(2), 2006, 130-137
- 47. C.C. Cormos, A.M. Cormos, S. Agachi, *Modelarea și simularea procesului de regenerare a amoniacului rezultat din tehnologia de obținere a sodei calcinate*, Revista de Chimie, 56(11), 2005, 1124-1130
- 48. C.C. Cormos, S. Agachi, *Modelarea si simularea extractiei pantolactonei folosind programul ChemCAD*, Revista de Chimie, 56(7), 2005, 750-756

II. Număr articole în reviste ISI la care candidatul este autor principal (prim autor sau autor de corespondență) (NP): NP ≥ 12

Scor realizat de candidat: NP = 32

- 1. C.C. Cormos, Assessment of chemical absorption/adsorption for post-combustion CO_2 capture from Natural Gas Combined Cycle (NGCC) power plants, Applied Thermal Engineering, 82, 2015, 120 128
- 2. A.M. Cormos, C. Dinca, C.C. Cormos, *Multi-fuel multi-product operation of IGCC power plants with carbon capture and storage (CCS)*, Applied Thermal Engineering, 2015, 74, 20 27

- 3. C.C. Cormos, Economic evaluations of coal-based combustion and gasification power plants with post-combustion CO₂ capture using calcium looping cycle, Energy, 2014, 78, 665 673
- 4. M. Muresan, C.C. Cormos, P.S. Agachi, *Biomass gasification-based hydrogen supply chain analysis under demand variability*, Studia UBB Chemia, LIX, 3, 2014, 29 42
- 5. B. Dorneanu, C.C. Cormos, *Techno-economic evaluation of Calcium Looping cycle for CO*₂ *capture from super-critical power plants*, Studia Universitatis Chemia, LIX, 4, 2014, 205 215
- 6. C.C. Cormos, *Economic implications of pre- and post-combustion calcium looping configurations applied to gasification power plants*, International Journal of Hydrogen Energy, 39, 2014, 10507-10516
- 7. C.C. Cormos, Renewable hydrogen production concepts from bioethanol reforming with carbon capture, International Journal of Hydrogen Energy, 39, 2014, 5597-5606
- 8. A.M. Cormos, C.C. Cormos, *Investigation of hydrogen and power co-generation based on direct coal chemical looping systems*, International Journal of Hydrogen Energy, 39, 2014, 2067-2077
- 9. C.C. Cormos, *Techno-economic and environmental evaluations of large scale gasification-based CCS project in Romania*, International Journal of Hydrogen Energy, 39, 2014, 13-27
- 10. C.C. Cormos, A.M. Cormos, L. Petrescu, Assessment of chemical looping-based conceptual designs for high efficient hydrogen and power co-generation applied to gasification processes, Chemical Engineering Research and Design, 92, 2014, 741-751
- 11. I.M. Bodea, C.C. Cormos, *Applications of chemical looping combustion to energy conversion processes*, Studia Chemia, 4, 2013, 7-22
- 12. C.C. Cormos, Assessment of flexible energy vectors poly-generation based on coal and biomass/solid wastes co-gasification with carbon capture, International Journal of Hydrogen Energy, 38, 2013, 7855-7866
- 13. C.C. Cormos, C. Dinca, Assessment of mass and energy integration aspects for IGCC power plants with carbon capture and storage (CCS), Studia Universitatis Chemia, LVIII, 1, 2013, 117-131
- 14. C.C. Cormos, K. Vatopoulos, E. Tzimas, Assessment of the consumption of water and construction materials in state-of-the-art fossil fuel power generation technologies involving CO₂ capture, Energy, 51, 2013, 37-49
- 15. C.C. Cormos, A.M. Cormos, Assessment of calcium-based chemical looping options for gasification power plants, International Journal of Hydrogen Energy, 38, 2013, 2306-2317
- 16. I.M. Bodea, C.C. Cormos, Evaluation of iron and nickel-based oxygen carriers for natural gas chemical looping combustion systems, Studia Universitatis Chemia, LVII, 2, 2012, 47 57

- 17. C.C. Cormos, Evaluation of syngas-based chemical looping applications for hydrogen and power co-generation with CCS, International Journal of Hydrogen Energy, 37, 2012, 13371-13386
- 18. C.C. Cormos, *Integrated assessment of IGCC power generation technology with carbon capture and storage (CCS)*, Energy, 42, 2012, 434-445
- 19. C.C. Cormos, *Hydrogen and power co-generation based on coal and biomass/solid wastes co-gasification with carbon capture and storage*, International Journal of Hydrogen Energy, 37, 2012, 5637-5648
- 20. C.C. Cormos, *Hydrogen production from fossil fuels with carbon capture and storage based on chemical looping systems*, International Journal of Hydrogen Energy, 36, 2011, 5960-5971
- 21. C.C. Cormos, Evaluation of power generation schemes based on hydrogen-fuelled combined cycle with carbon capture and storage (CCS), International Journal of Hydrogen Energy, 36, 2011, 3726-3738
- 22. C.C. Cormos, Evaluation of energy integration aspects for IGCC-based hydrogen and electricity co-production with carbon capture and storage, International Journal of Hydrogen Energy, 35, 2010, 7485-7497
- 23. C.C. Cormos, Evaluation of iron based chemical looping for hydrogen and electricity co-production by gasification process with carbon capture and storage, International Journal of Hydrogen Energy, 35, 2010, 2278 2289
- 24. C.C. Cormos, F. Starr, E. Tzimas, *Use of lower grade coals in IGCC plants with carbon capture for the co-production of hydrogen and electricity*, International Journal of Hydrogen Energy, 35, 2010, 556 567
- 25. C.C. Cormos, Assessment of hydrogen and electricity co-production schemes based on gasification process with carbon capture and storage, International Journal of Hydrogen Energy, 34, 2009, 6065 6077
- 26. C.C. Cormos, S. Agachi, *Gasification process A practical way for solid fossil fuels decarbonisation*, Studia Universitatis Babes-Bolyai, Chemia, LIV, 1, 2009, 81 91
- 27. C.C. Cormos, A.M. Cormos, S. Agachi, *Power generation from coal and biomass based on IGCC concept with pre and post-combustion carbon capture methods*, Asia Pacific Journal of Chemical Engineering, 4, 2009, 870 877
- 28. C.C. Cormos, F. Starr, E. Tzimas, S. Peteves, *Innovative concepts for hydrogen production processes based on coal gasification with CO₂ capture*, International Journal of Hydrogen Energy, 2008, Volume 33, Issue 4, 1286 1294
- 29. C.C. Cormos, F. Starr, E. Tzimas, S. Peteves, *Compressor issues for hydrogen production and transmission through a long distance pipeline network*, Revista de Chimie, 59(4), 2008, 443 447
- 30. C.C. Cormos, A.M. Cormos, S. Agachi, Modelarea şi simularea procesului de carbonatare a saramurii amoniacale din cadrul tehnologiei de obținere a sodei calcinate, Revista de Chimie, 57(2), 2006, 130-137

- 31. C.C. Cormos, A.M. Cormos, S. Agachi, *Modelarea și simularea procesului de regenerare a amoniacului rezultat din tehnologia de obținere a sodei calcinate*, Revista de Chimie, 56(11), 2005, 1124-1130
- 32. C.C. Cormos, S. Agachi, *Modelarea si simularea extractiei pantolactonei folosind programul ChemCAD*, Revista de Chimie, 56(7), 2005, 750-756

III. Factor de impact cumulat (FIC): FIC \geq 16

Scor realizat de candidat: FIC = 78,691

Nr.	Articol	FI	FIC
1.	C.C. Cormos, Economic evaluations of coal-based combustion and	4,159	4,159
	gasification power plants with post-combustion CO ₂ capture using		
	calcium looping cycle, Energy, 2014, 78, 665 - 673		
2.	C.C. Cormos, K. Vatopoulos, E. Tzimas, Assessment of the	4,159	4,159
	consumption of water and construction materials in state-of-the-art		
	fossil fuel power generation technologies involving CO_2 capture,		
	Energy, 51, 2013, 37-49		
3.	C.C. Cormos, Integrated assessment of IGCC power generation	4,159	4,159
	technology with carbon capture and storage (CCS), Energy, 42,		
	2012, 434-445		
4.	A. Padurean, C.C. Cormos, P.S. Agachi, Pre-combustion carbon	3,821	1,273
	dioxide capture by gas-liquid absorption for Integrated		
	Gasification Combined Cycle power plants, International Journal		
	of Greenhouse Gas Control, 7, 2012, 1-11		
5.	A. Padurean, C.C. Cormos, A.M. Cormos, P.S. Agachi,	3,821	0,955
	Multicriterial analysis of post-combustion carbon dioxide capture		
	using alkanolamines, International Journal of Greenhouse Gas		
	Control, 5, 2011, 676-685		
6.	L. Petrescu, C.C. Cormos, Waste reduction (WAR) algorithm	3,59	1,795
	applied for environmental impact assessment of coal gasification		
	with carbon capture and storage, Journal of Cleaner Production,		
	2014, accepted, in press		
7.	S. Fogarasi, C.C. Cormos, Technico-economic assessment of coal	3,59	1,795
	and sawdust co-firing power generation with CO_2 capture, Journal		
	of Cleaner Production, 2014, accepted, in press		
8.	C.C. Cormos, Economic implications of pre- and post-combustion	2,93	2,93
	calcium looping configurations applied to gasification power		
	plants, International Journal of Hydrogen Energy, 39, 2014, 10507-		
	10516		

9.	C.C. Cormos, Renewable hydrogen production concepts from bioethanol reforming with carbon capture, International Journal of Hydrogen Energy, 39, 2014, 5597-5606	2,93	2,93
10.	A.M. Cormos, C.C. Cormos, <i>Investigation of hydrogen and power</i> co-generation based on direct coal chemical looping systems, International Journal of Hydrogen Energy, 39, 2014, 2067-207	2,93	2,93
11.	C.C. Cormos, Techno-economic and environmental evaluations of large scale gasification-based CCS project in Romania, International Journal of Hydrogen Energy, 39, 2014, 13-27	2,93	2,93
12.	C.C. Cormos, Assessment of flexible energy vectors polygeneration based on coal and biomass/solid wastes co-gasification with carbon capture, International Journal of Hydrogen Energy, 38, 2013, 7855-7866	2,93	2,93
13.	C.C. Cormos, A.M. Cormos, Assessment of calcium-based chemical looping options for gasification power plants, International Journal of Hydrogen Energy, 38, 2013, 2306-2317	2,93	2,93
14.	C.C. Cormos, Evaluation of syngas-based chemical looping applications for hydrogen and power co-generation with CCS, International Journal of Hydrogen Energy, 37, 2012, 13371-13386	2,93	2,93
15.	C.C. Cormos, Hydrogen and power co-generation based on coal and biomass/solid wastes co-gasification with carbon capture and storage, International Journal of Hydrogen Energy, 37, 2012, 5637-5648	2,93	2,93
16.	C.C. Cormos, Hydrogen production from fossil fuels with carbon capture and storage based on chemical looping systems, International Journal of Hydrogen Energy, 36, 2011, 5960-5971	2,93	2,93
17.	C.C. Cormos, Evaluation of power generation schemes based on hydrogen-fuelled combined cycle with carbon capture and storage (CCS), International Journal of Hydrogen Energy, 36, 2011, 3726-3738	2,93	2,93
18.	C.C. Cormos, Evaluation of energy integration aspects for IGCC-based hydrogen and electricity co-production with carbon capture and storage, International Journal of Hydrogen Energy, 35, 2010, 7485-7497	2,93	2,93
19.	C.C. Cormos, Evaluation of iron based chemical looping for hydrogen and electricity co-production by gasification process with carbon capture and storage, International Journal of Hydrogen Energy, 35, 2010, 2278 – 2289	2,93	2,93
20.	C.C. Cormos, F. Starr, E. Tzimas, <i>Use of lower grade coals in IGCC plants with carbon capture for the co-production of hydrogen and electricity</i> , International Journal of Hydrogen Energy, 35, 2010, 556 – 567	2,93	2,93

21.	C.C. Cormos, Assessment of hydrogen and electricity co-	2,93	2,93
	production schemes based on gasification process with carbon		
	capture and storage, International Journal of Hydrogen Energy,		
	34, 2009, 6065 – 6077		
22.	C.C. Cormos, F. Starr, E. Tzimas, S. Peteves, Innovative concepts	2,93	2,93
	for hydrogen production processes based on coal gasification with		
	CO ₂ capture, International Journal of Hydrogen Energy, 2008,		
	Volume 33, Issue 4, 1286 – 1294		
23.	A.M. Cormos, C. Dinca, C.C. Cormos, Multi-fuel multi-product	2,624	2,624
	operation of IGCC power plants with carbon capture and storage		
	(CCS), Applied Thermal Engineering, 2015, 74, 20 - 27		
24.	C.C. Cormos, Assessment of chemical absorption/adsorption for	2,624	2,624
	post-combustion CO ₂ capture from Natural Gas Combined Cycle		
	(NGCC) power plants, Applied Thermal Engineering, 82, 2015,		
	120 - 128		
25.	E. Tzimas, A. Mercier, C.C. Cormos, S. Peteves, Trade-off in	2,696	0,674
	emissions of acid gas pollutants and of carbon dioxide in fossil		
	fuels power plants with carbon capture, Energy Policy, 35, 2007,		
	3991 – 3998		
26.	C.C. Cormos, A.M. Cormos, L. Petrescu, Assessment of chemical	2,293	2,293
	looping-based conceptual designs for high efficient hydrogen and		
	power co-generation applied to gasification processes, Chemical		
	Engineering Research and Design, 92, 2014, 741-751		
27.	M. Muresan, C.C. Cormos, P.S. Agachi, Techno-economical	2,293	0,764
	assessment of coal and biomass gasification-based hydrogen		
	production supply chain system, Chemical Engineering Research		
	and Design, 91, 2013, 1527-1541		
28.	S. Bandyopadhyay, C.C. Cormos, Water Management in Process	2,235	1,117
	Industries Incorporating Regeneration and Recycle through a		
	Single Treatment Unit, Industrial and Engineering Chemistry		
	Research, 2008, 47(4), 1111 – 1119		
29.	M. Muresan, C.C. Cormos, S. Agachi, Comparative life cycle	1,51	0,503
	analysis for gasification-based hydrogen production systems,		
	Journal of Renewable and Sustainable Energy, 6, 2014, 013131		
30.	F. Goga, R. Dudric, C.C. Cormos, F. Imre, L. Bizo, Radu Misca,	1,258	0,209
	Fly ash from thermal power plant, raw material for glass-ceramic,		
	Environmental Engineering and Management Journal, 12 (2),		
	2013, 337-342		
31.	A. Padurean, C.C. Cormos, P.S. Agachi, Techno-economic	1,258	0,419
	evaluation of pre- and post-combustion carbon dioxide capture		
	methods applied for an IGCC plant for power generation,		
	Environmental Engineering and Management Journal, 12, 2013,		

	2191- 2202		
32.	C.C. Cormos, A.M. Cormos, S. Agachi, Power generation from coal and biomass based on IGCC concept with pre and post-combustion carbon capture methods, Asia – Pacific Journal of Chemical Engineering, 4, 2009, 870 – 877	0,623	0,623
33.	F. Starr, C.C. Cormos, Materials challenges and gasifier choices in IGCC processes for clean and efficient energy conversion, Materials Research Innovations 15, 2011, 428-446	0,473	0,236
34.	C. Dinca, C.C. Cormos, H. Necula, Environmental impact assessment of GHG emissions generated by coal life cycle and solutions for reducing CO ₂ , Journal of Environmental Protection, 4, 2013, 5-15	0,67	0,223
35.	C.C. Cormos, F. Starr, E. Tzimas, S. Peteves, <i>Compressor issues</i> for hydrogen production and transmission through a long distance pipeline network, Revista de Chimie, 59(4), 2008, 443 – 447	0,677	0,677
36.	C.C. Cormos, A.M. Cormos, S. Agachi, Modelarea şi simularea procesului de carbonatare a saramurii amoniacale din cadrul tehnologiei de obținere a sodei calcinate, Revista de Chimie, 57(2), 2006, 130-137	0,677	0,677
37.	C.C. Cormos, A.M. Cormos, S. Agachi, <i>Modelarea și simularea</i> procesului de regenerare a amoniacului rezultat din tehnologia de obținere a sodei calcinate, Revista de Chimie, 56(11), 2005, 1124-1130	0,677	0,677
38.	C.C. Cormos, S. Agachi, <i>Modelarea si simularea extractiei</i> pantolactonei folosind programul ChemCAD, Revista de Chimie, 56(7), 2005, 750-756	0,677	0,677
39.	B. Dorneanu, C.C. Cormos, <i>Techno-economic evaluation of Calcium Looping cycle for CO</i> ₂ <i>capture from super-critical power plants</i> , Studia Universitatis Chemia, LIX, 4, 2014, 205 - 215	0,136	0,136
40.	M. Muresan, C.C. Cormos, P.S. Agachi, <i>Biomass gasification-based hydrogen supply chain analysis under demand variability</i> , Studia UBB Chemia, LIX, 3, 2014, 29 - 42	0,136	0,136
41.	I.M. Bodea, C.C. Cormos, Applications of chemical looping combustion to energy conversion processes, Studia Chemia, 4, 2013, 7-22	0,136	0,136
42.	C.C. Cormos, C. Dinca, Assessment of mass and energy integration aspects for IGCC power plants with carbon capture and storage (CCS), Studia Universitatis Chemia, LVIII, 1, 2013, 117-131	0,136	0,136
43.	I.M. Bodea, C.C. Cormos, Evaluation of iron and nickel-based oxygen carriers for natural gas chemical looping combustion systems, Studia Universitatis Chemia, LVII, 2, 2012, 47 - 57	0,136	0,136

44.	M. Badaluta, C.C. Cormos, P.S. Agachi, Hydrogen Production	0,136	0,045
	through co-gasification of coal and biomass with carbon dioxide		
	capture, Studia Universitatis Chemia, LVII, 1, 2012, 167-174		
45.	V. Goia, C.C. Cormos, P.S. Agachi, Influence of temperature and	0,136	0,045
	heating rate on biomass pyrolysis in a fixed-bed reactor, Studia		
	Universitatis Babes-Bolyai, Chemia, LVI, 2, 2011, 49 – 56		
46.	A.M. Padurean, C.C. Cormos, A.M. Cormos, S. Agachi, <i>Technical</i>	0,136	0,034
	assessment of CO ₂ capture using alkanolamines solutions, Studia		
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	de purificare a 1,4 - benzochinon - guanil - hidrazon -		
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	Aplicant: S.C. Terapia S.A., Cluj-Napoca, Romania		
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	E. Cotora, L. Lenta, M. Moga, H. Muresanu, M. Racolta, <i>Process</i>		
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	S.C. Terapia S.A., Cluj-Napoca, Romania		
	Total FIC		78,691

IV. Număr total de citări (NC): $NC \ge 40$

Scor realizat de candidat: NC = 600