

SUPPLEMENTARY MATERIALS

Table S1. Top 10 most cited countries in the study field.

Rank	Country	Documents	Citations count
1	Turkey	195	6,940
2	China	161	5,618
3	United States	90	3,970
4	Iran	155	3,866
5	Australia	62	3,056
6	Greece	60	2,162
7	Croatia	48	1,758
8	Spain	60	1,751
9	Italy	81	1,733
10	Canada	51	1,642

Table S2. Detail of the Keywords with the highest Co-occurrence.

Cluster	Keywords	Tematic area	Citations
#9	Natural zeolite, acid treatment, microstructure	AW treatment with NZ	690
#4	Adsorption, kinetic, isotherm, equilibrium	Kinetic of adsorption	393
#5	Zeolite, nitrogen, sediment, remediation. phosphorus	NZ soil remediation	392
#3	Purification, water quality, clinoptilolite, mordenite	NZ water purification	379
#1	Copper, lead,zinc,arsenic	Metal removal	258
#2	Wastewater, removal,ammonium,silver	Urban WW treatment	209
#6	Heavy metal, chabazite, philipsite	NZ HM adsorption	154
#10	Ion Exchange, selectivity, ammonia removal	Ammonia selectivity by IE	132
#8	Water treatment, drinking water, ammonium removal	NZ use in DW	66
#7	Degradation, cation exchange, stabilization	NZ use in SD	45
#11	Ammonia, adsorption capacity	Ammonia AC by NZ	40

HM: Heavy Metals; WW: WasteWater; SD: Soil Degradation; DW: Drinking Water; AW: Acid Water; IE: Ion Exchange; AC: Adsorption Capacity and NZ: Natural Zeolites.

Table S3. *Detail of the authors with the highest Co-citation.*

Cluster	Authors	Thematic area	Citations
#1	Wang, S., Wang, Y., Li, Y.	Ion removal in aqueous media	11,447
#2	Loizidou, M., Inglezakis, V.J., Ho, Y.S.	Ion exchange of clinoptilolite	8,402
#3	Mumpton, F.A., Breck, D.W., Misaelides, P.	Properties and applications of the NZ	7,015
#4	Borja, R., Sanchez, E., Buszewski, B.	NZ livestock applications	5,289
#7	Bowman, R.S., Li, Z., Langella, A.	Sorption kinetics of the NZ	2,835
#6	Colella, C., Shekarchi, M., Ahmadi, B.	NZ applications in construction	2,525
#5	Olguin, M.T., Hrenovic, J., Solache-Rios, M.	Sorption processes with NZ	2,167
#8	Ming, D.W., Passaglia, E., Rehakova, M.	Agricultural uses of the NZ	748
#9	Nizami, A.S., Rehan, M., Barakat, M.A.	NZ applied to energy recovery	463
#10	Rottinghaus, G.E., Oguz, H., Harvey, R.B.	Adsorption of organic compounds by NZ	222

NZ: Natural Zeolite

Table S4. Detail of the journals with the highest number of citations.

Cluster	Thematic area	Most cited Journal	Citations
#2	Technologies applied to the environment	Water Research, Bioresource Technology, Environmental Science & Technology	7,637
#1	Catalysis of materials	Microporous and Mesoporous Materials, Journal of Catalysis	6,284
#6	Materials and methods of separation	Journal of Hazardous Materials, Separation and Purification Technology	3,911
#3	Chemical processes and environment	Chemical Engineering Journal, Desalination	3,650
#5	Construction waste management	Applied Clay Science, Construction and Building Materials	2,274
#4	Energy and Waste Management	Industrial & Engineering Chemistry Research, Waste Management	1,437