Hyundae Lee

List of Publications by Year
in descending order

39 papers	1,249 citations	331670 21 h-index	361022 35 g-index
41 all docs	41 docs citations	41 times ranked	370 citing authors

#	Article	IF	Citations
1	Spectral Theory of a Neumann–Poincaré-Type Operator and Analysis of Cloaking Due to Anomalous Localized Resonance. Archive for Rational Mechanics and Analysis, 2013, 208, 667-692.	2.4	127
2	Asymptotic Imaging of Perfectly Conducting Cracks. SIAM Journal of Scientific Computing, 2010, 32, 894-922.	2.8	80
3	Enhancement of Near-Cloaking. Part II: The Helmholtz Equation. Communications in Mathematical Physics, 2013, 317, 485-502.	2.2	70
4	Enhancement of Near Cloaking Using Generalized Polarization Tensors Vanishing Structures. Part I: The Conductivity Problem. Communications in Mathematical Physics, 2013, 317, 253-266.	2.2	68
5	Spectral Analysis of the Neumann–Poincaré Operator and Characterization of the Stress Concentration in Anti-Plane Elasticity. Archive for Rational Mechanics and Analysis, 2013, 208, 275-304.	2.4	66
6	A method of biological tissues elasticity reconstruction using magnetic resonance elastography measurements. Quarterly of Applied Mathematics, 2007, 66, 139-175.	0.7	64
7	Optimal estimates for the electric field in two dimensions. Journal Des Mathematiques Pures Et Appliquees, 2007, 88, 307-324.	1.6	60
8	Enhancement of Near Cloaking for the Full Maxwell Equations. SIAM Journal on Applied Mathematics, 2013, 73, 2055-2076.	1.8	58
9	Minnaert resonances for acoustic waves in bubbly media. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2018, 35, 1975-1998.	1.4	46
10	Decomposition theorems and fine estimates for electrical fields in the presence of closely located circular inclusions. Journal of Differential Equations, 2009, 247, 2897-2912.	2.2	43
11	Anomalous localized resonance using a folded geometry in three dimensions. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2013, 469, 20130048.	2.1	37
12	Optimal estimates and asymptotics for the stress concentration between closely located stiff inclusions. Mathematische Annalen, 2015, 363, 1281-1306.	1.4	32
13	Asymptotic Analysis of High-Contrast Phononic Crystals and a Criterion for the Band-Gap Opening. Archive for Rational Mechanics and Analysis, 2009, 193, 679-714.	2.4	27
14	Double-negative acoustic metamaterials. Quarterly of Applied Mathematics, 2019, 77, 767-791.	0.7	27
15	Subwavelength phononic bandgap opening in bubbly media. Journal of Differential Equations, 2017, 263, 5610-5629.	2.2	25
16	Progress on the strong Eshelby's conjecture and extremal structures for the elastic moment tensor. Journal Des Mathematiques Pures Et Appliquees, 2010, 94, 93-106.	1.6	24
17	A Mathematical and Numerical Framework for Bubble Meta-Screens. SIAM Journal on Applied Mathematics, 2017, 77, 1827-1850.	1.8	24
18	Effective viscosity properties of dilute suspensions of arbitrarily shaped particles. Asymptotic Analysis, 2012, 80, 189-211.	0.5	23

#	Article	IF	Citations
19	Strong convergence of the solutions of the linear elasticity and uniformity of asymptotic expansions in the presence of small inclusions. Journal of Differential Equations, 2013, 254, 4446-4464.	2.2	22
20	Spectral properties of the Neumann–Poincaré operator and uniformity of estimates for the conductivity equation with complex coefficients. Journal of the London Mathematical Society, 2016, 93, 519-545.	1.0	22
21	Boundary Perturbations Due to the Presence of Small Linear Cracks in an Elastic Body. Journal of Elasticity, 2013, 113, 75-91.	1.9	20
22	Asymptotic Expansions for Eigenvalues of the Lamé System in the Presence of Small Inclusions. Communications in Partial Differential Equations, 2007, 32, 1715-1736.	2.2	19
23	Sub-wavelength focusing of acoustic waves in bubbly media. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2017, 473, 20170469.	2.1	18
24	Honeycomb-Lattice Minnaert Bubbles. SIAM Journal on Mathematical Analysis, 2020, 52, 5441-5466.	1.9	17
25	Cloaking Due to Anomalous Localized Resonance in Plasmonic Structures of Confocal Ellipses. SIAM Journal on Applied Mathematics, 2014, 74, 1691-1707.	1.8	16
26	Reconstruction of inhomogeneous conductivities via the concept of generalized polarization tensors. Annales De L'Institut Henri Poincare (C) Analyse Non Lineaire, 2014, 31, 877-897.	1.4	15
27	High-order exceptional points and enhanced sensing in subwavelength resonator arrays. Studies in Applied Mathematics, 2021, 146, 440-462.	2.4	14
28	The Mean Escape Time for a Narrow Escape Problem with Multiple Switching Gates. Multiscale Modeling and Simulation, 2011, 9, 817-833.	1.6	12
29	Coated inclusions of finite conductivity neutral to multiple fields in two-dimensional conductivity or anti-plane elasticity. European Journal of Applied Mathematics, 2014, 25, 329-338.	2.9	11
30	Bloch Waves in Bubbly Crystal Near the First Band Gap: A High-Frequency Homogenization Approach. SIAM Journal on Mathematical Analysis, 2019, 51, 45-59.	1.9	11
31	Layer potential techniques for the narrow escape problem. Journal Des Mathematiques Pures Et Appliquees, 2012, 97, 66-84.	1.6	8
32	Bounds on the Size of an Inclusion Using the Translation Method for Two-Dimensional Complex Conductivity. SIAM Journal on Applied Mathematics, 2014, 74, 939-958.	1.8	7
33	Construction of conformal mappings by generalized polarization tensors. Mathematical Methods in the Applied Sciences, 2015, 38, 1847-1854.	2.3	7
34	Bound states in the continuum and Fano resonances in subwavelength resonator arrays. Journal of Mathematical Physics, 2021, 62, .	1.1	7
35	Vibration testing for anomaly detection. Mathematical Methods in the Applied Sciences, 2009, 32, 863-874.	2.3	5
36	Transient elasticity imaging and time reversal. Proceedings of the Royal Society of Edinburgh Section A: Mathematics, 2011, 141, 1121-1140.	1.2	5

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37	Vibration Analysis for Detecting Internal Corrosion. Studies in Applied Mathematics, 2009, 122, 85-104.	2.4	4
38	Subwavelength resonances of encapsulated bubbles. Journal of Differential Equations, 2019, 267, 4719-4744.	2.2	4
39	Asymptotic analysis of the narrow escape problem in dendritic spine shaped domain: three dimensions. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 325203.	2.1	3